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MODEL NO. 580.50290450

Sears
DIVISION 57
TECHNICAL DATA SHEET
TELEVISION/RADIO

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WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGES 2 AND 3 OF THIS MANUAL.

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Refer to the Div. 57 Authorized Price List 528 for current selling Prices, availability and ordering information. Service Flash References.

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SEARS, ROEBUCK AND CO.

X-RAY RADIATION PRECAUTION

WARNING: The potential source of X-Radiation in TV set is the picture tube.

NOTE: It is important to use an accurate, periodically calibrated, high voltage meter.

1. Turn the Brightness control fully counterclockwise.
2. Measure the High Voltage. The high voltage meter should indicate a nominal 7.5 kv and the maximum 10.5 kv.

If the upper meter indication exceeds the maximum level, immediate service is required to prevent the possibility of premature component failure.

3. To prevent a possibility of X-Radiation it is essential to use the specified picture tube.

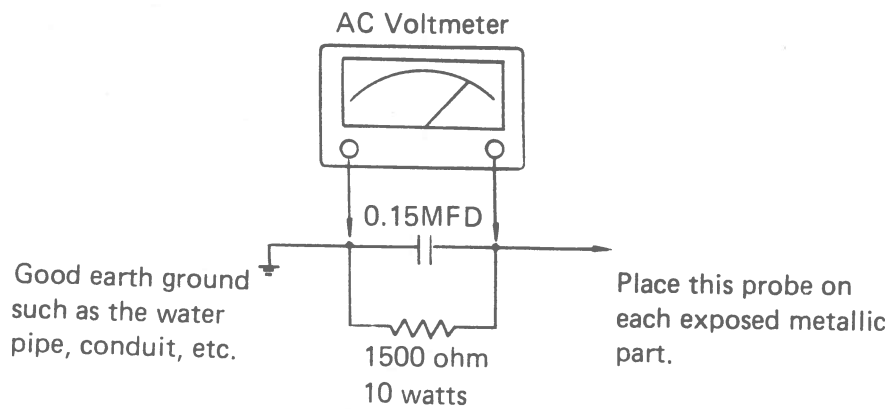
SAFETY PRECAUTION

WARNING: Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver.

The following are the necessary precautions to be observed before servicing this chassis.

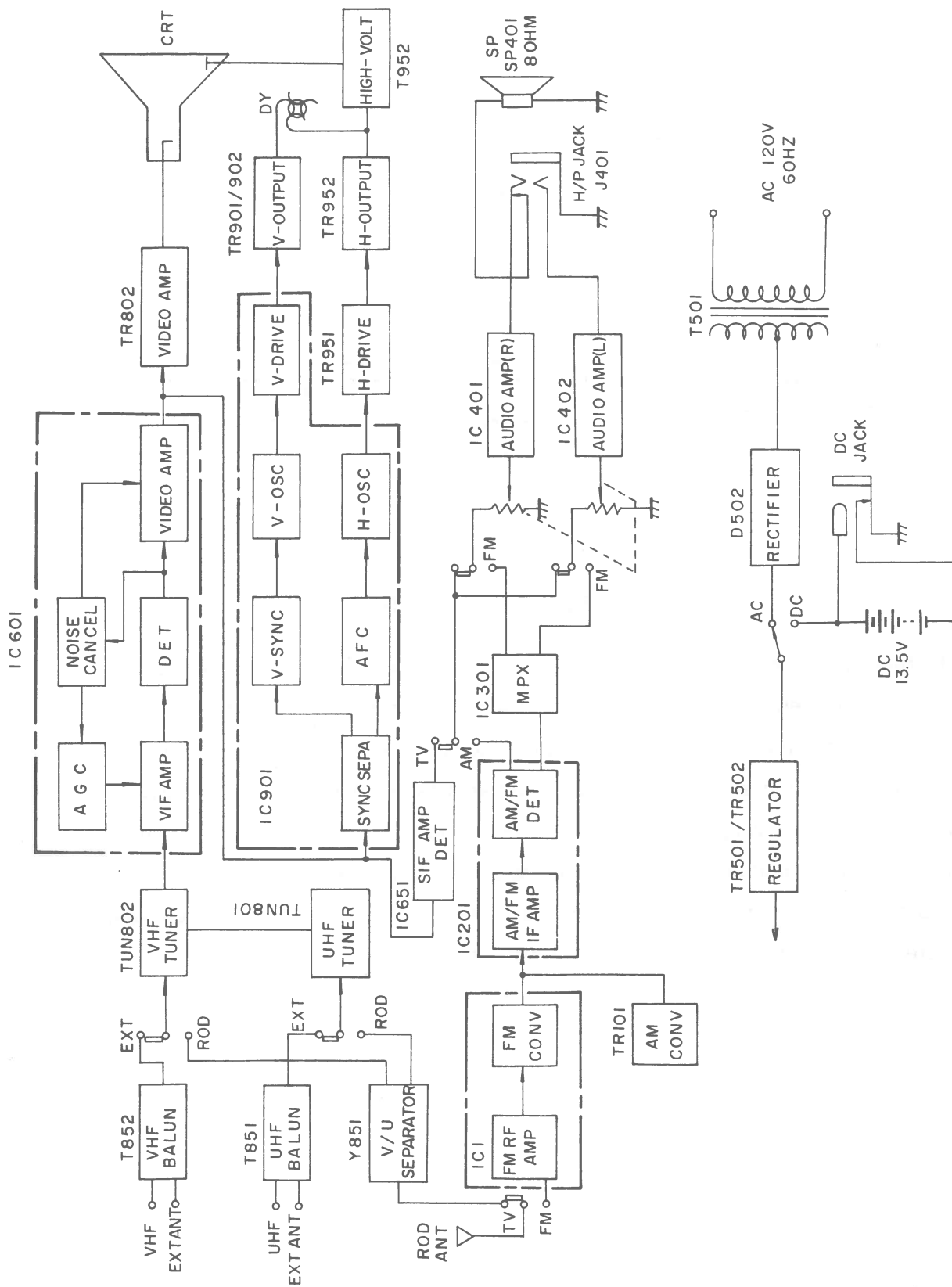
1. Always discharge the picture tube anode to the CRT conductive coating before handling. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Used shatter proof goggles and keep picture tube away from the unprotected body while handling.
2. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as: non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network, etc.
3. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheads, metal overlays, control shafts, etc. to be sure the set is safe to operated without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner.

Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15 mfd, AC type capacitor, between a known good earth ground (water pipe, conduit etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15 mfd capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measured must not exceed 0.3 volt RMS. This corresponds to 0.2 miliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements, electrical components having such features are identified by a STAR (★) in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.



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SCHEMATIC DIAGRAM

NOTES:

1. Resistors is shown in ohm K = 1,000, M = 1,000,000.
2. Unless otherwise noted in schematic, all capacitor values are expressed in mfd. P = $\mu\mu$
3. Voltages read with "VTVM" from point indicated to chassis ground.
4. All waveforms measured with strong signal input contrast set to give normal picture.
5. Voltage reading taken are nominal values and may vary $\pm 20\%$

TRANSISTORS LEAD LAYOUT



TR101
TR501
TR801
TR951



TR802
TR901
TR902
TR952

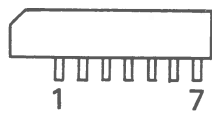


TR601

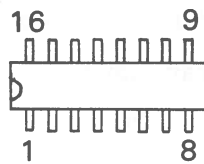


TR502

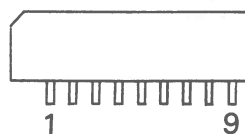
IC LEAD LAYOUT (TOP VIEW)



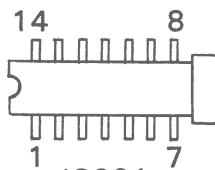
IC1



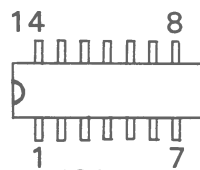
IC201



IC301, 401, 402,



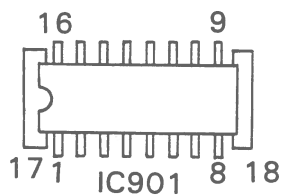
IC601



IC651

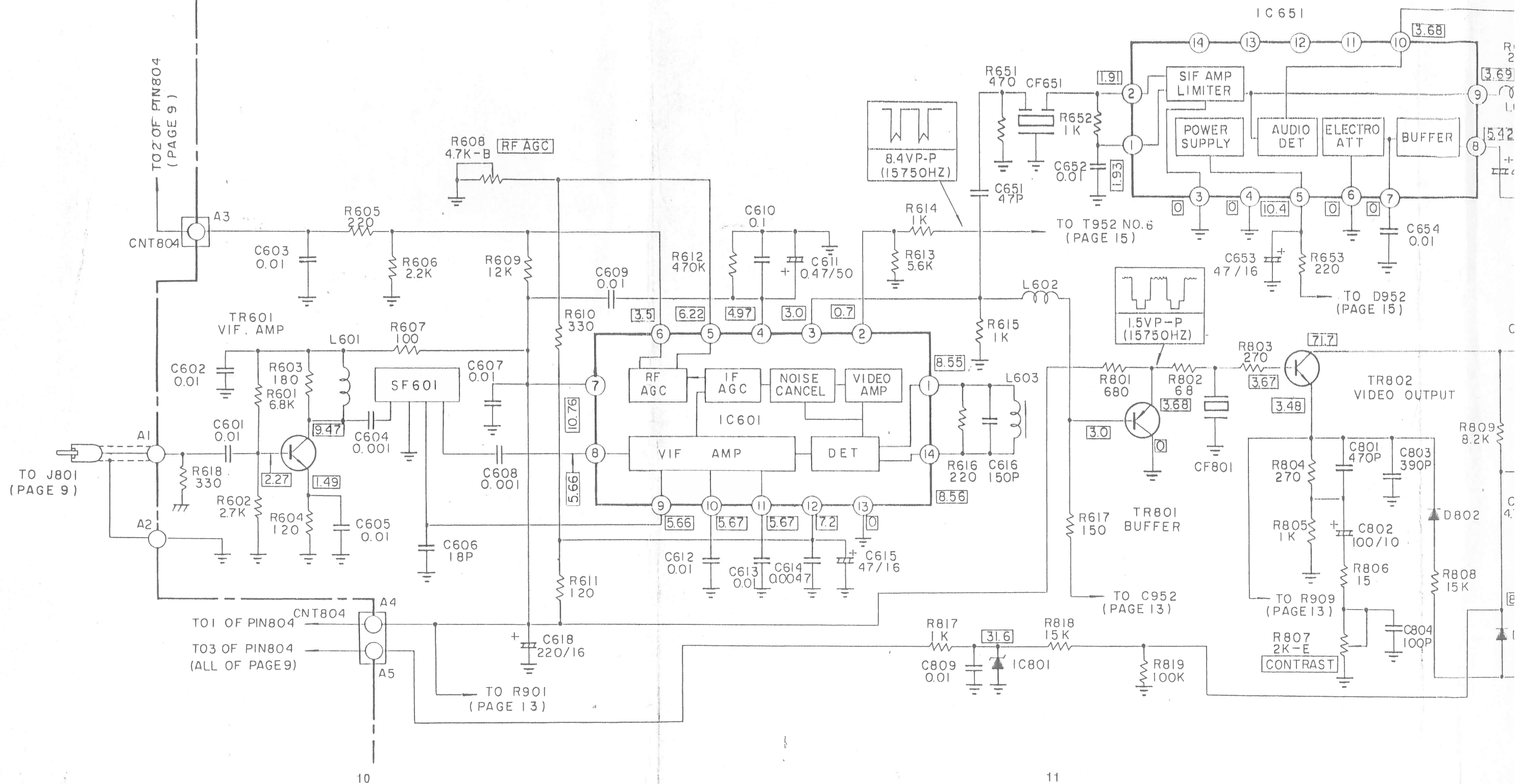


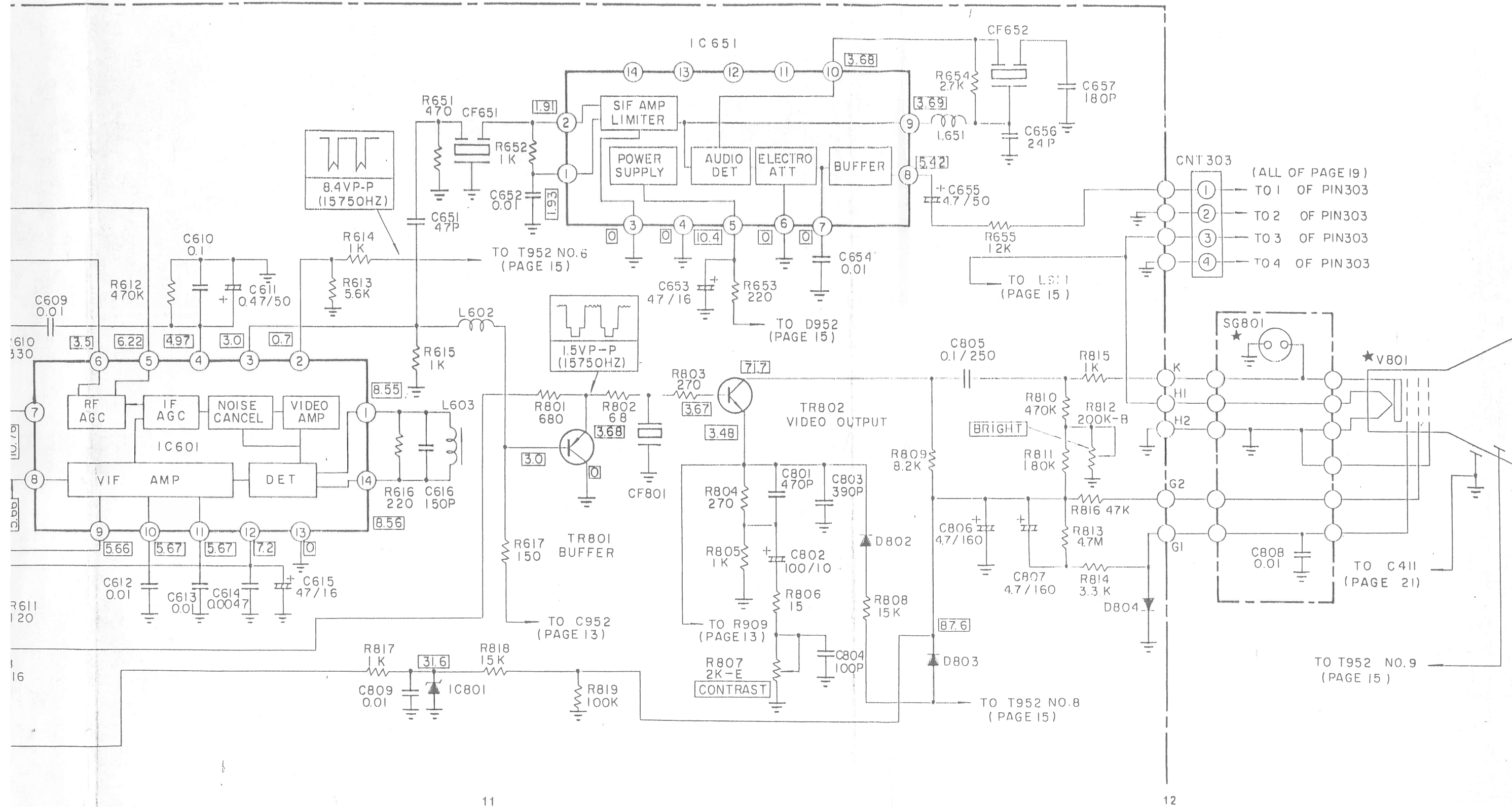
IC801

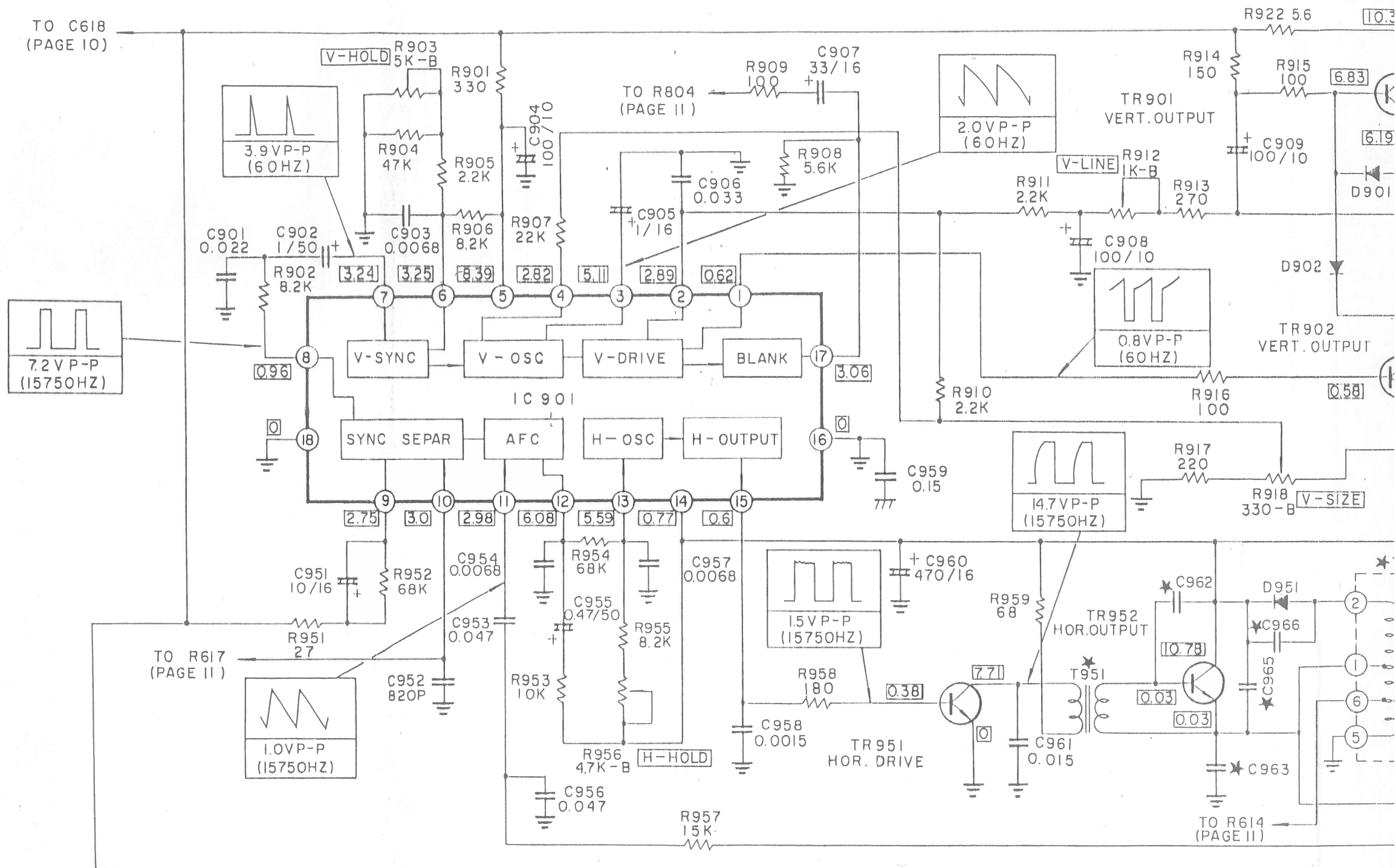


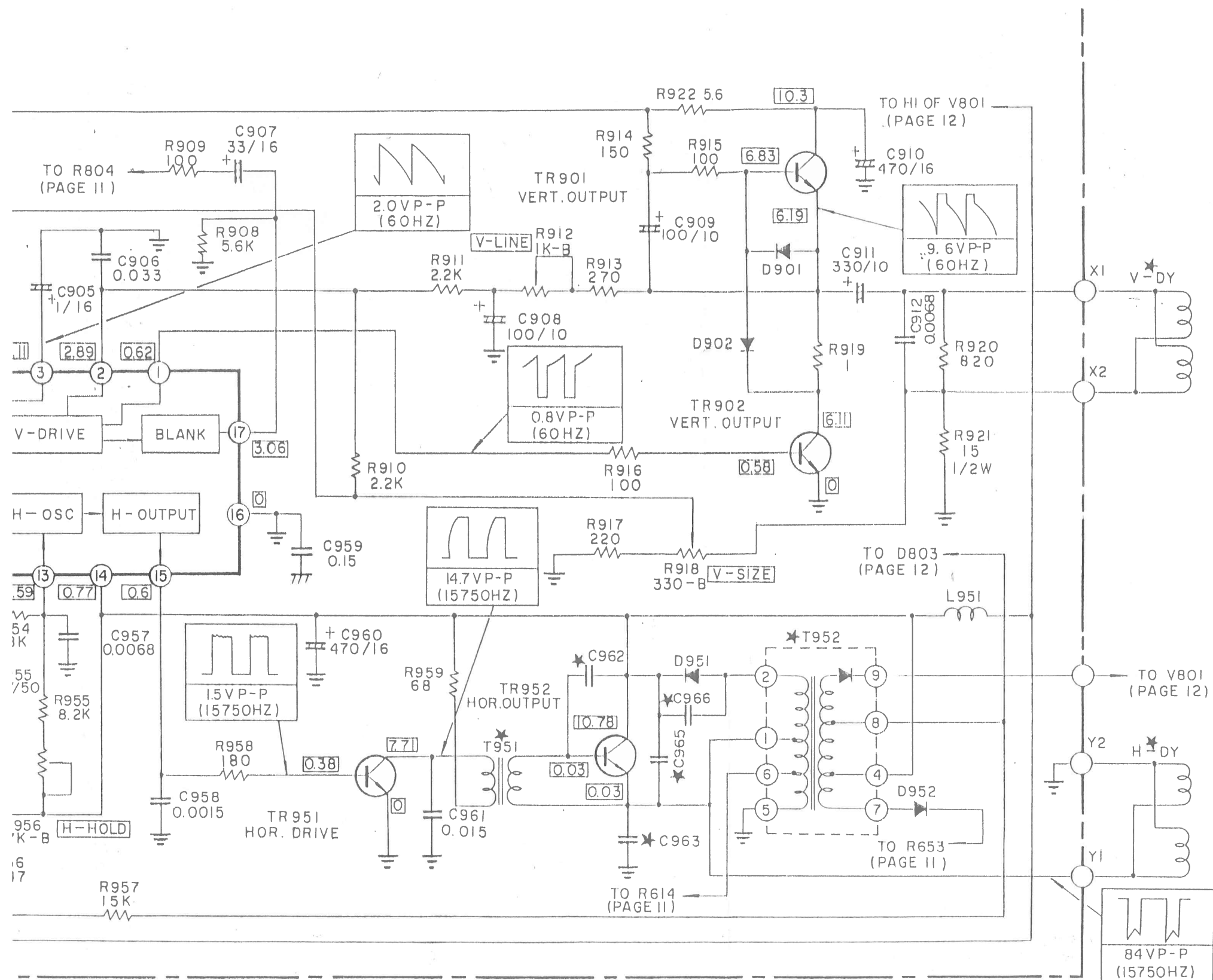
IC901

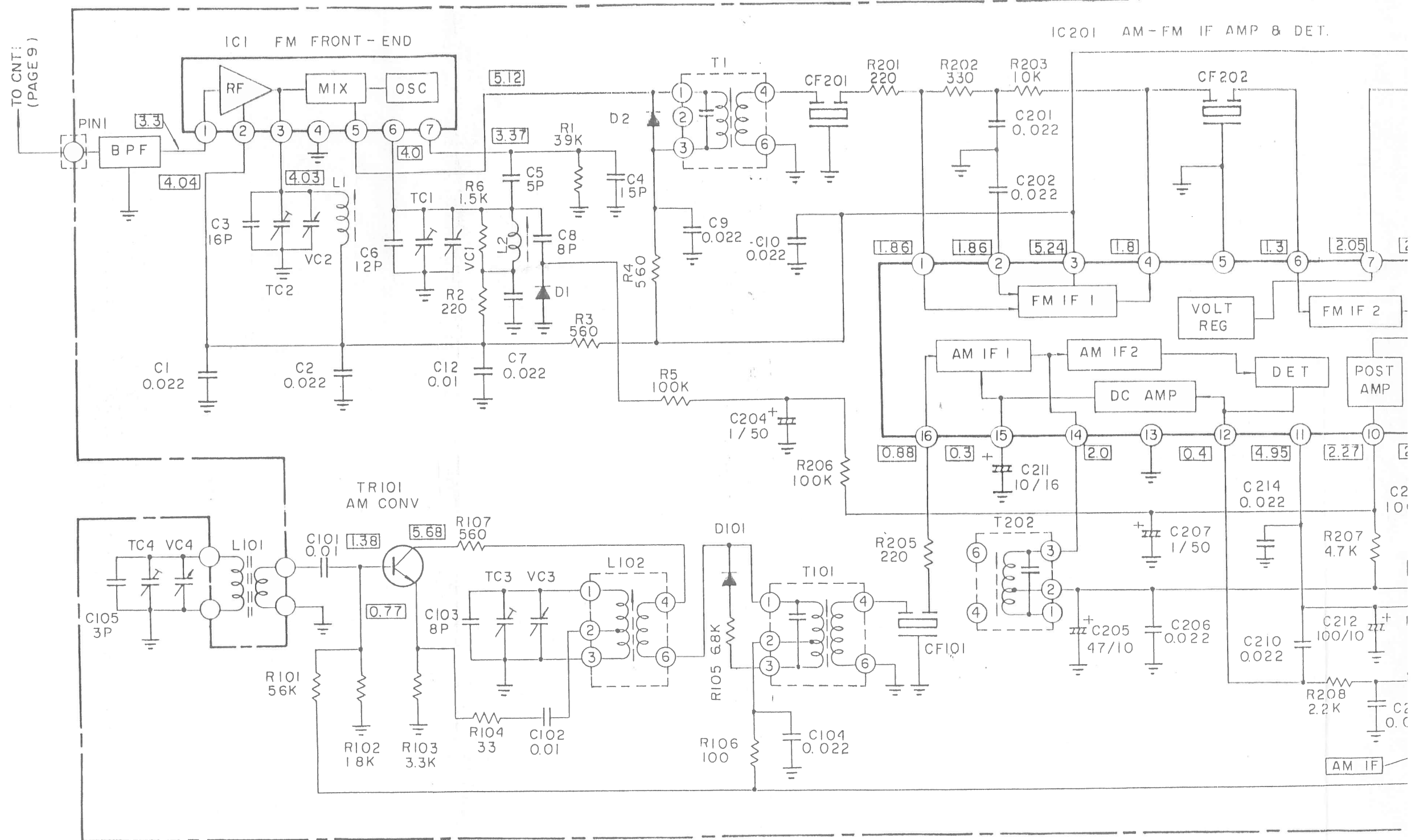
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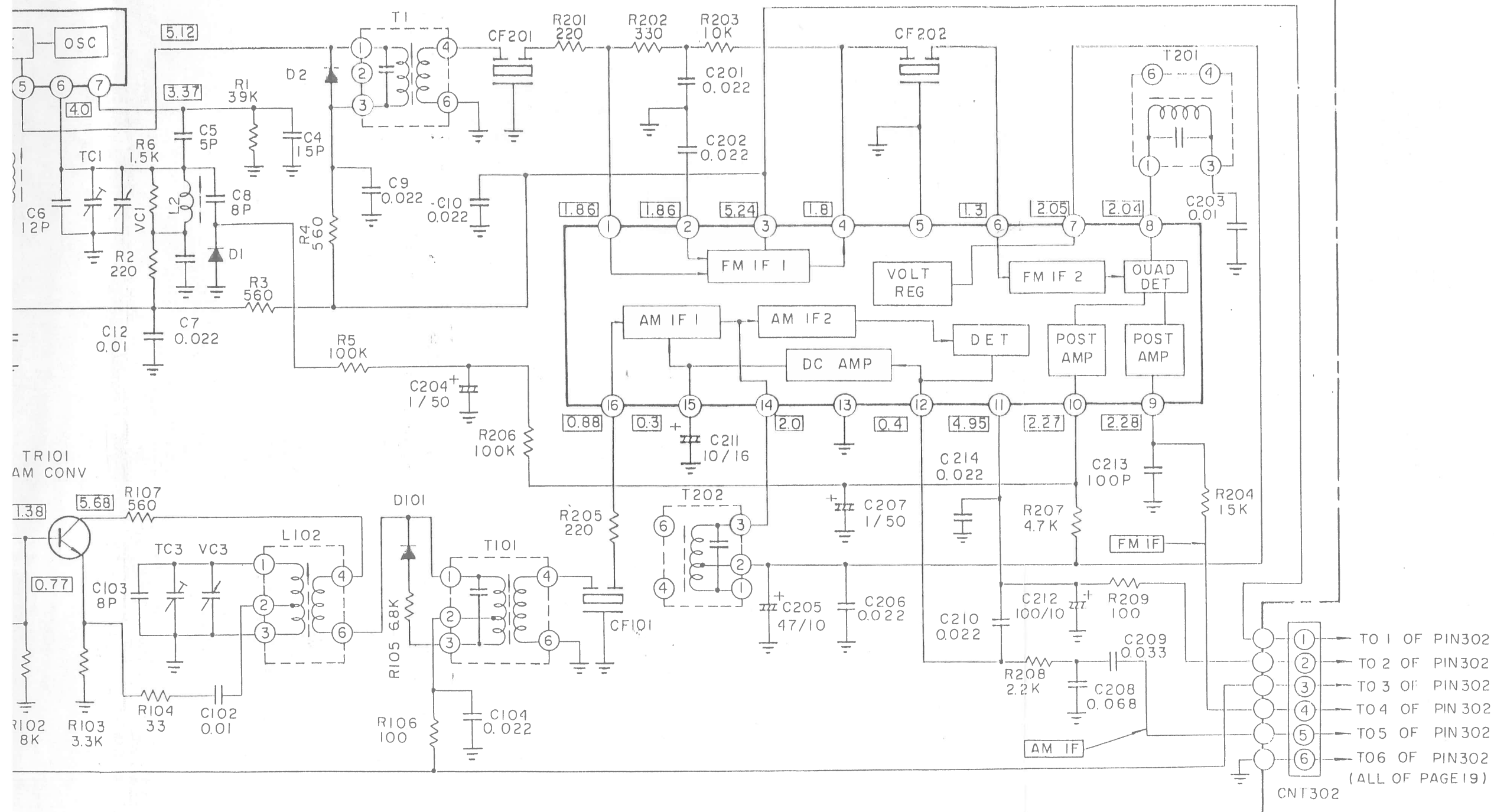


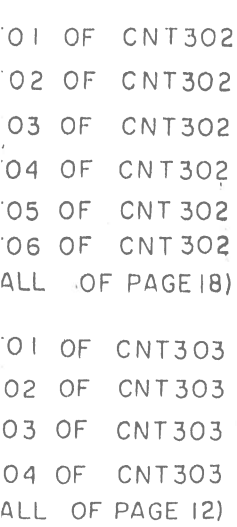


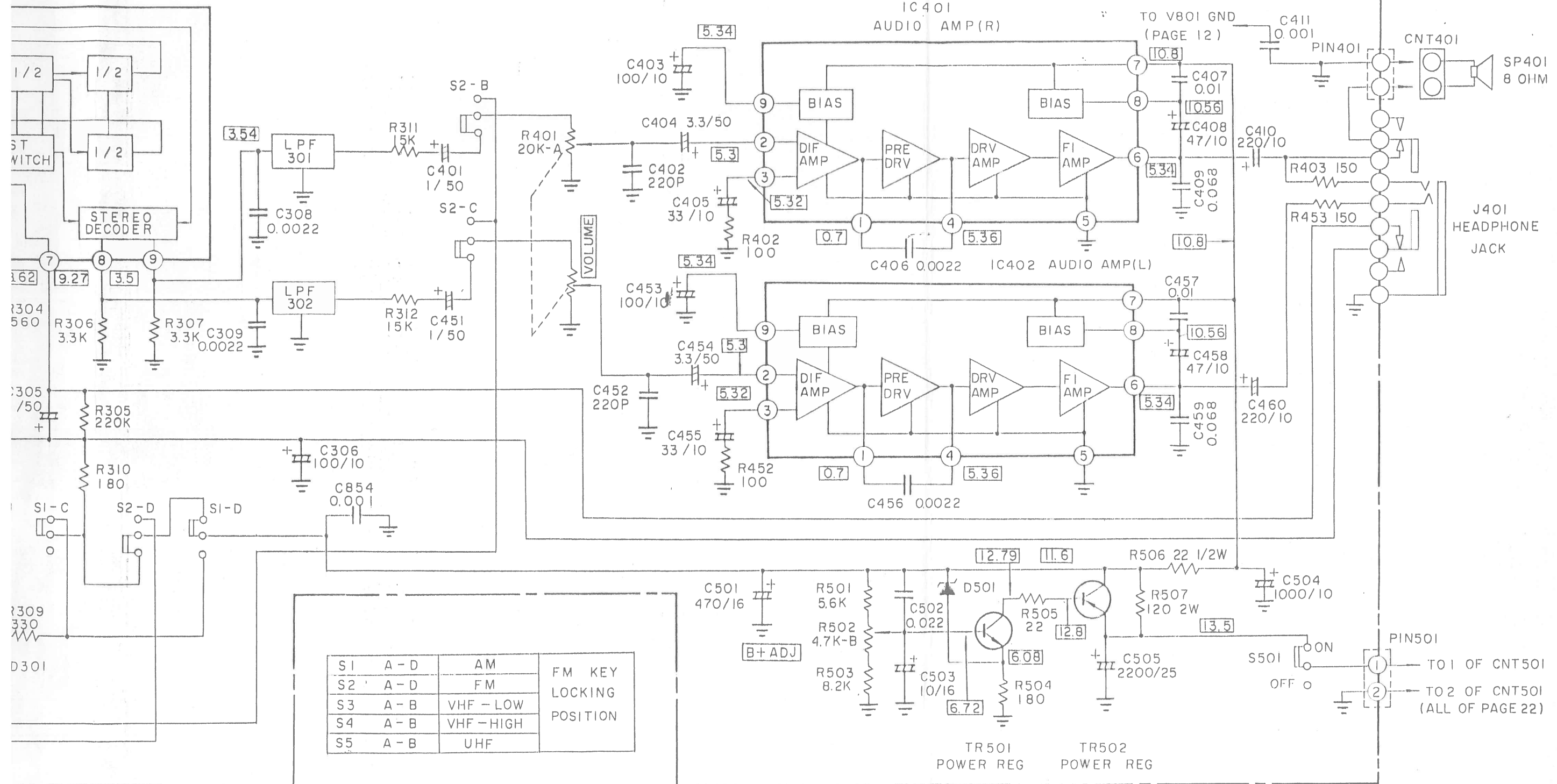


NT - END

IC201 AM-FM IF AMP & DET.

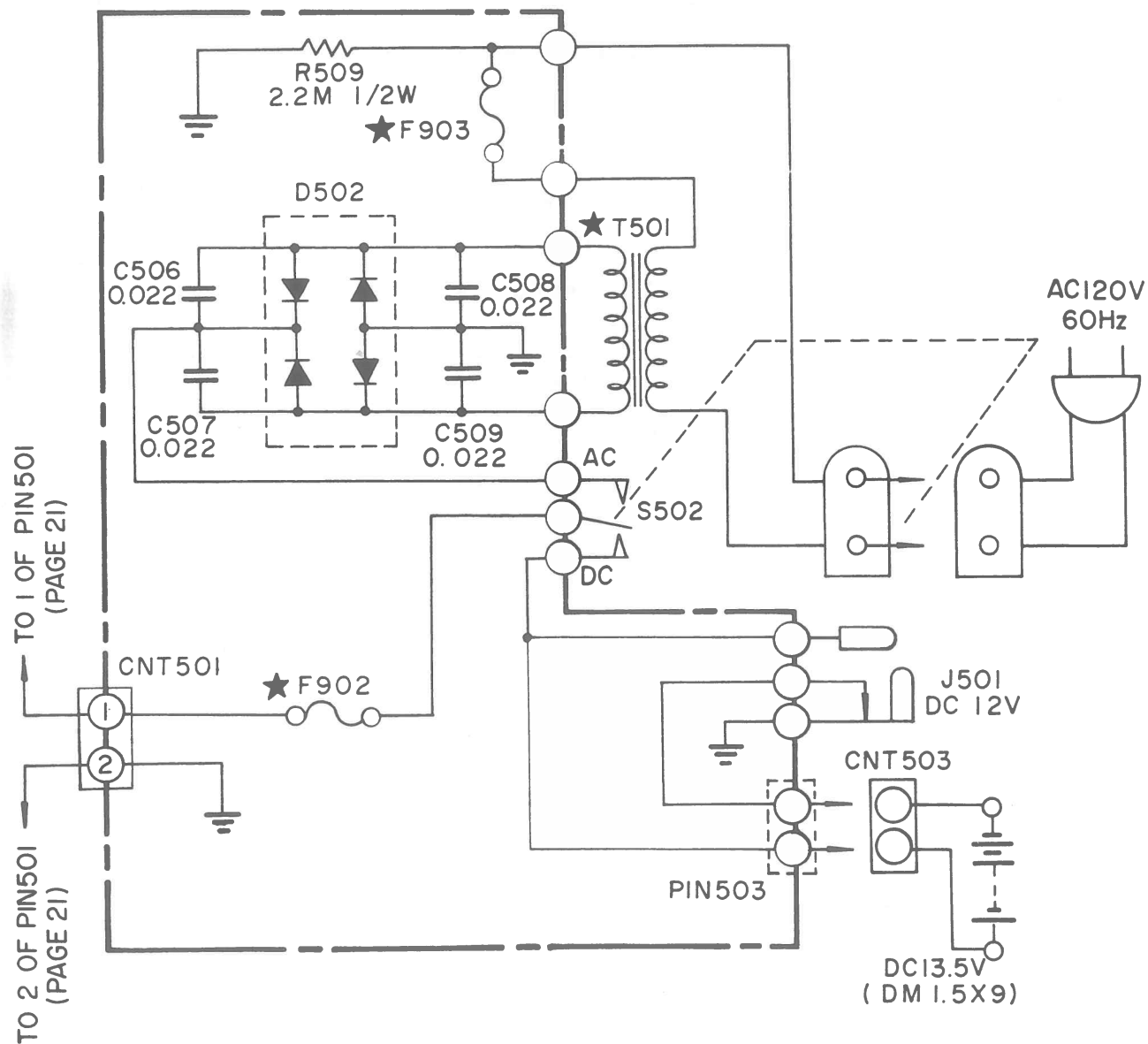






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ELECTRICAL PARTS LIST

ABBREVIATIONS: Capacitors CC : Ceramic T.C. type
CK : Ceramic Hi-K type
CL : Polypropylene
CQ : Polyester
CF : Metalized Mylar
CE : Electrolytic
Resistors RD : Carbon Film
RC : Composition
RS : Oxide Metal Film
VR : Variable Resistor
Tolerance (Not for CE) ... D : $\pm 0.5\%$ J : $\pm 5\%$ K : $\pm 10\%$
M : $\pm 20\%$ Z : $+80\%$
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(All resistors are 1/4W unless otherwise noted.)

Refer to the Div. 57 Authorized price List 528 for current selling prices, availability and ordering information. Service Flash References.

SCHEMATIC LOCATION	PART NO.	DESCRIPTION
RESISTORS		
R1	46-61345-3	RD, 39K-J
R2	64-22195	RD, 220-J
R3	64-56195	RD, 560-J
R4	64-56195	RD, 560-J
R5	64-10495	RD, 100K-J
R6	64-15295	RD, 1.5K-J
R101	46-63303-3	RD, 56K-J
R102	64-18395	RD, 18K-J
R103	64-33295	RD, 3.3K-J
R104	64-33095	RD, 33-J
R105	46-63297-3	RD, 6.8K-J
R106	64-10195	RD, 100-J
R107	64-56195	RD, 560-J
R201	64-22195	RD, 220-J
R202	64-33195	RD, 330-J
R203	46-63284-3	RD, 10K-J
R204	46-63288-3	RD, 15K-J
R205	64-22195	RD, 220-J
R206	64-10495	RD, 100K-J
R207	64-47295	RD, 4.7K-J
R208	46-63286-3	RD, 2.2 K-J
R209	64-10195	RD, 100-J
R301	64-10295	RD, 1K-J
R302	46-63284-3	RD, 10K-J
R303	46-24826-3	VR, 4.7K-B
R304	64-56195	RD, 560-J
R305	64-22495	RD, 220K-J
R306	64-33295	RD, 3.3K-J
R307	64-33295	RD, 3.3K-J
R308	64-10195	RD, 100-J
R309	64-33195	RD, 330-J
R310	64-18195	RD, 180-J
R311	46-63288-3	RD, 15K-J

SCHEMATIC LOCATION	PART NO.	DESCRIPTION
R312	46-63288-3	RD, 15K-J
R313	64-56195	RD, 560-J
R401	46-241288-3	VR, 20K-A
R402	64-10195	RD, 100-J
R403	64-15195	RD, 150-J
R452	64-10195	RD, 100-J
R453	64-15195	RD, 150-J
R501	46-63295-3	RD, 5.6K-J
R502	46-24826-3	VR, 4.7K-B
R503	64-82295	RD, 8.2K-J
R504	64-18195	RD, 180-J
R505	64-22095	RD, 22-J
R506	64-22005	RD, 22-J 1/2W
R507	46-6814-3	RS, 120-J 2W
R509	64-22505	RC, 2.2M-K 1/2W
R601	46-63297-3	RD, 6.8K-J
R602	46-63287-3	RD, 2.7K-J
R603	64-18195	RD, 180-J
R604	64-12195	RD, 120-J
R605	64-22195	RD, 220-J
R606	46-63286-3	RD, 2.2K-J
R607	64-10195	RD, 100-J
R608	46-24826-3	VR, 4.7K-B
R609	64-12395	RD, 12K-J
R610	64-33195	RD, 330-J
R611	64-12195	RD, 120-J
R612	64-47495	RD, 470K-J
R613	46-63295-3	RD, 5.6K-J
R614	64-10295	RD, 1K-J
R615	64-10295	RD, 1K-J
R616	64-22195	RD, 220-J
R617	64-15195	RD, 150-J
R618	64-33195	RD, 330-J

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SCHEMATIC LOCATION	PART NO.	DESCRIPTION
R651	46-61350-3	RD, 470-J
R652	64-10295	RD, 1 K-J
R653	64-22195	RD, 220-J
R654	46-63287-3	RD, 2.7 K-J
R655	64-12395	RD, 12K-J
R801	46-63293-3	RD, 680-J
R802	46-63292-3	RD, 68-J
R803	64-27195	RD, 270-J
R804	64-27195	RD, 270-J
R805	64-10295	RD, 1 K-J
R806	61-312-1	RD, 15-J
R807	46-241289-3	VR, 2 K-E
R808	46-63288-3	RD, 15K-J
R809	64-82295	RD, 8.2 K-J
R810	64-47495	RD, 470 K-J
R811	64-18495	RD, 180 K-J
R812	46-241290-3	VR, 200 K-B
R813	64-47595	RD, 4.7 M-J
R814	64-33295	RD, 3.3 K-J
R815	64-10295	RD, 1 K-J
R816	46-63294-3	RD, 47 K-J
R817	64-10295	RD, 1 K-J
R818	46-63288-3	RD, 15 K-J
R819	64-10495	RD, 100 K-J
R851	46-241291-3	VR, 100 K-B
R852	64-56195	RD, 560-J
R853	46-24706-3	VR, 47K-B
R854	46-24706-3	VR, 47 K-B
R855	64-12195	RD, 120-J
R856	64-68395	RD, 68K-J
R857	64-10495	RD, 100 K-J
R901	64-33195	RD, 330 J
R902	64-82295	RD, 8.2 K-J
R903	46-241292-3	VR, 5 K-B

SCHEMATIC LOCATION	PART NO.	DESCRIPTION
R904	46-63294-3	RD, 47 K-J
R905	46-63286-3	RD, 2.2 K-J
R906	64-82295	RD, 8.2 K-J
R907	64-22395	RD, 22 K-J
R908	46-63295-3	RD, 5.6 K-J
R909	64-10195	RD, 100-J
R910	46-63286-3	RD, 2.2 K-J
R911	46-63286-3	RD, 2.2 K-J
R912	46-241017-3	VR, 1 K-B
R913	64-27195	RD, 270-J
R914	64-15195	RD, 150-J
R915	64-10195	RD, 100-J
R916	64-10195	RD, 100-J
R917	64-22195	RD, 220-J
R918	46-24284-3	VR, 330-B
R919	46-61780-3	RD, 1.0-J
R920	64-82195	RD, 820-J
R921	64-15005	RD, 15-J
R922	46-63265-3	RD, 5.6-J
R951	64-27095	RD, 27-J
R952	64-68395	RD, 68 K-J
R953	46-63284-3	RD, 10 K-J
R954	64-68395	RD, 68 K-J
R955	64-82295	RD, 8.2 K-J
R956	46-24826-3	VR, 4.7 K-B
R957	46-63288-3	RD, 15 K-J
R958	64-18195	RD, 180-J
R959	46-63292-3	RD, 68-J
CAPACITORS		
C1	46-20547-3	CK, 0.022 μ F-Z 50V
C2	46-20547-3	CK, 0.022 μ F-Z 50V
C3	46-201071-3	CC, 16PF-J SL 50V
C4	46-20907-3	CC, 15PF-J SL 50V

SCHEMATIC LOCATION	PART NO.	DESCRIPTION
C5	46-201230-3	CC, 5PF-D
C6	12-120231-2	CC, 12PF-JUJ=N750
C7	46-20547-3	CK, 0.022 μ F-Z 50V
C8	46-201030-3	CC, 8PF-D CH 50V
C9	46-20547-3	CK, 0.022 μ F-Z 50V
C10	46-20547-3	CK, 0.022 μ F-Z 50V
C12	20-100002	CC, 0.01 μ F-Z 50V
C101	46-20875-3	CQ, 0.01 μ F-K 50V
C102	46-20875-3	CQ, 0.01 μ F-K 50V
C103	46-201030-3	CC, 8PF-D CH- 50V
C104	46-201301-3	CQ, 0.022 μ F-K 50V
C105	46-201415-3	CC, 3PF-D
C201	46-20547-3	CK, 0.022 μ F-Z 50V
C202	46-20547-3	CK, 0.022 μ F-Z 50V
C203	46-201061-3	CC, 0.01 μ F-Z 50V
C204	46-18367-3	CE, 1 μ F 50V
C205	46-18663-3	CE, 47 μ F 10V
C206	46-20547-3	CK, 0.022 μ F-Z 50V
C207	46-18367-3	CE, 1 μ F 50V
C208	46-201218-3	CQ, 0.068 μ F-K 50V
C209	46-201196-3	CQ, 0.033 μ F-K 50V
C210	46-201301-3	CQ, 0.022 μ F-K 50V
C211	46-18492-3	CE, 10 μ F 16V
C212	46-18676-3	CE, 100 μ F 10V
C213	46-201282-3	CC, 100PF-K SL 50V
C214	46-201301-3	CQ, 0.022 μ F-K 50V
C301	46-18565-3	CE, 2.2 μ F 50V
C302	46-18367-3	CE, 1 μ F 50V
C303	46-18572-3	CE, 3.3 μ F 50V
C304	46-201192-3	CY, 1000PF-JR
C305	46-18367-3	CE, 1 μ F 50V
C306	46-18676-3	CE, 100 μ F 10V
C307	46-18656-3	CE, 330 μ F 10V
C308	20-856-1	CQ, 0.0022 μ F-K 50V

SCHEMATIC LOCATION	PART NO.	DESCRIPTION
C309	20-856-1	CQ, 0.0022 μ F-K 50V
C401	46-18367-3	CE, 1 μ F 50V
C402	46-20908-3	CC, 220PF-K
C403	46-18676-3	CE, 100 μ F 10V
C404	46-18572-3	CE, 3.3 μ F 50V
C405	46-18683-3	CE, 33 μ F 10V
C406	46-201299-3	CK, 0.0022 μ F-Z 50V
C407	46-201298-3	CQ, 0.01 μ F-M 50V
C408	46-18663-3	CE, 47 μ F 10V
C409	46-201218-3	CQ, 0.068 μ F 50V
C410	46-18673-3	CE, 220 μ F 10V
C411	46-201229-3	CK, 0.001 μ F-K 50V
C451	46-18367-3	CE, 1 μ F 50V
C452	46-20908-3	CC, 220PF-K
C453	46-18676-3	CE, 100 μ F 10V
C454	46-18572-3	CE, 3.3 μ F 50V
C455	46-18683-3	CE, 33 μ F 10V
C456	46-201299-3	CK, 0.0022 μ F-Z 50V
C457	46-201298-3	CQ, 0.01 μ F-M 50V
C458	46-18663-3	CE, 47 μ F 10V
C459	46-201218-3	CQ, 0.068 μ F 50V
C460	46-18673-3	CE, 220 μ F 10V
C501	46-18695-3	CE, 470 μ F 16V
C503	46-18492-3	CE, 10 μ F 16V
C504	46-18574-3	CE, 1000 μ F 16V
C505	46-18466-3	CE, 2200 μ F 25V
C506	46-20547-3	CK, 0.022 μ F-Z 50V
C507	46-20547-3	CK, 0.022 μ F-Z 50V
C508	46-20547-3	CK, 0.022 μ F-Z 50V
C509	46-20547-3	CK, 0.022 μ F-Z 50V
C601	46-201061-3	CK, 0.01 μ F-Z 50V
C602	46-201061-3	CK, 0.01 μ F-Z 50V
C603	20-100002	CK, 0.01 μ F-Z 50V
C604	46-201229-3	CK, 0.001 μ F-K 50V
C605	46-201061-3	CK, 0.01 μ F-Z 50V
C606	12-180231-3	CC, 18PF-J SL 50V

SCHEMATIC LOCATION	PART NO.	DESCRIPTION
C607	46-201061-3	CK, 0.01 μ F-Z 50V
C608	46-201229-3	CK, 0.001 μ F-K 50V
C609	46-201061-3	CK, 0.01 μ F-Z 50V
C610	46-201302-3	CQ, 0.1 μ F-K 50V
C611	46-18525-3	CE, 0.47 μ F 50V
C612	46-201061-3	CK, 0.01 μ F-Z 50V
C613	46-201061-3	CK, 0.01 μ F-Z 50V
C614	46-20956-3	CK, 0.0047 μ F-K 50V
C615	46-18553-3	CE, 47 μ F 16V
C616	46-201213-3	CC, 150 PF-J
C618	46-18495-3	CE, 220 μ F 16V
C651	46-20927-3	CC, 47PF-J SL 50V
C652	46-201061-3	CK, 0.01 μ F-Z 50V
C653	46-18553-3	CE, 47 μ F 16V
C654	46-20875-3	CQ, 0.01 μ F-K 50V
C655	46-18579-3	CE, 4.7 μ F 50V
C656	46-20573-3	CC, 24PF-J SL 50V
C657	46-201099-3	CC, 180PF-J SL 50V
C801	46-201100-3	CC, 470PF-J SL 50V
C802	46-18676-3	CE, 100 μ F 10V
C803	46-201191-3	CC, 390PF-J SL 50V
C804	46-201292-3	CC, 100PF-J SL 50V
C805	46-201483-3	CF, 0.1 μ F 250V
C806	46-18607-3	CE, 4.7 μ F 160V
C807	46-18607-3	CE, 4.7 μ F 160V
C808	46-201061-3	CK, 0.01 μ F-Z 50V
C809	46-201061-3	CK, 0.01 μ F-Z 50V
C851	46-201061-3	CK, 0.01 μ F-Z 50V
C852	46-18565-3	CE, 2.2 μ F 50V
C853	46-18676-3	CE, 100 μ F 10V
C854	46-201229-3	CK, 0.001 μ F-K 50V
C901	46-201301-3	CQ, 0.022 μ F-K 50V
C902	46-18520-3	CE, 1 μ F 50V
C903	46-201190-3	CQ, 0.0068 μ F-K 50V
C904	46-18676-3	CE, 100 μ F 10V

SCHEMATIC LOCATION	PART NO.	DESCRIPTION
C905	46-18503-3	CE, 1 μ F 16V-K (K μ)
C906	46-201196-3	CQ, 0.033 μ F-K 50V
C907	46-18575-3	CE, 33 μ F 16V
C908	46-18676-3	CE, 100 μ F 10V
C909	46-18676-3	CE, 100 μ F 10V
C910	46-18695-3	CE, 470 μ F 16V
C911	46-18656-3	CE, 330 μ F 10V
C912	46-201190-3	CQ, 0.0068 μ F-K 50V
C951	46-18492-3	CE, 10 μ F 16V-K
C952	46-201294-3	CC, 820PF-J SL 50V
C953	46-201219-3	CQ, 0.047 μ F-K 50V
C954	46-201190-3	CQ, 0.0068 μ F-K 50V
C955	46-18525-3	CE, 0.47 μ F 50V
C956	46-201219-3	CQ, 0.047 μ F-K 50V
C957	46-201190-3	CQ, 0.0068 μ F-K 50V
C958	46-201212-3	CQ, 0.0015 μ F-K 50V
C959	46-201033-3	CQ, 0.15 μ F-K
C960	46-18695-3	CE, 470 μ F 16V
C961	46-201317-3	CQ, 0.015 μ F-K 50V
★ C962	12-821811-4	CK, 820PF-K 500V
★ C963	12-222711-6	CK, 0.0022 μ F-K 500V
★ C965	12-821811-4	CK, 820PF-K 50V
★ C966	46-401232-3	CL, 0.018 μ F 200V
TRANSISTORS		
TR101	46-861389-9	KTC 9011
TR501	46-861390-3	KTC9014A-C
TR502	46-861221-3	GS2053G
TR502	46-861221-3	GS2053H
TR601	46-861217-3	MPS9426B
TR801	46-861395-3	KTC9015A-B
TR802	46-86591-3	KTC2229-0
TR901	46-86545-3	KTC2120-Y
TR902	46-86545-3	KTC2120-Y

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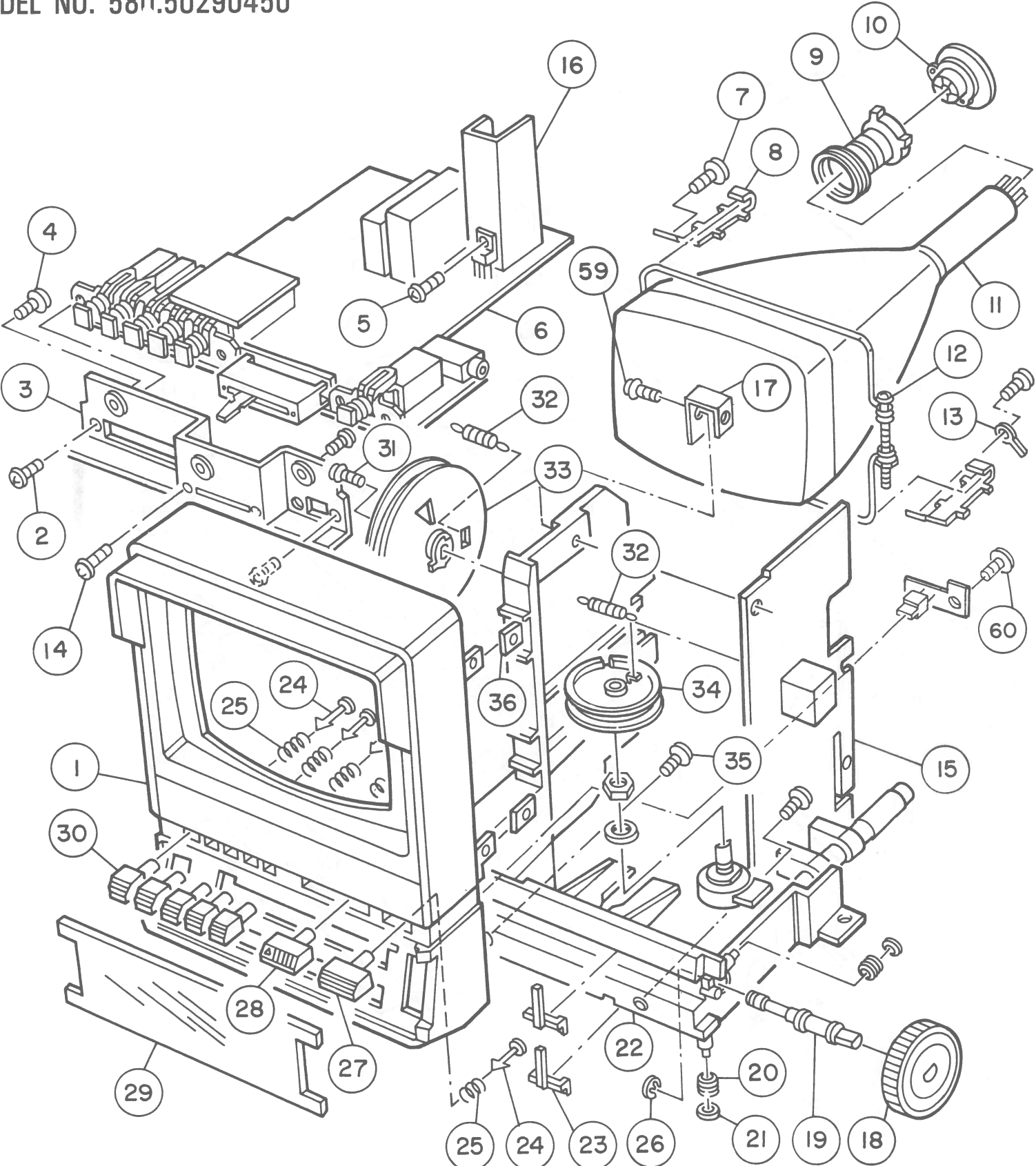
SCHEMATIC LOCATION	PART NO.	DESCRIPTION
TR951	46-861390-3	KTC9014A-B
TR952	46-861122-3	KTC2233
INTEGRATED CIRCUITS		
IC1	46-13943-3	AN7213
IC201	46-131196-3	BA4220
IC201	46-133000-3	HA12413
IC301	46-131197-3	AN7420
IC301	46-13645-3	KIA7343P
IC401	46-13841-3	KIA7313A-P
IC402	46-13841-3	KIA7313A-P
IC601	45-13699-3	UPC1366C
IC651	13-29-6	GL3201
IC651	13-29-6	LSC1008P
IC801	46-86474-3	L5631
IC801	46-861278-3	HZT-33
IC801	46-86474-3	UPC574J
IC801	46-86474-3	TAA550B
IC901	46-13538-3	HA11423
IC901	46-13538-3	GL3401
DIODES		
D1	46-862001-3	1S2236
D2	86-10-1	1K261
D101	86-10-1	1K60
D301	46-86763-3	ZPD5.6V
D304	46-861387-3	LED
D501	46-86735-3	HZ6A
D5C2	46-861393-3	2W02
D502	46-861393-3	RC203
D802	86-10-1	1K261
D803	86-67-3	RGP10D
D804	86-67-3	IN4003GP
D901	46-86309-3	KDS1555 KEC
D902	46-86309-3	KDS1555 KEC
D951	86-67-3	RGP10D
D952	86-67-3	RGP10D

SCHEMATIC LOCATION	PART NO.	DESCRIPTION
COILS AND TRANSFORMERS		
L1	46-102062-3	COIL, FM
L2	46-101890-3	COIL, FM
L101	46-8287-3	COIL, AM ANT
L102	46-101892-3	COIL, AM OSC
L601	46-102063-3	COIL, TRAP
L602	46-101897-3	COIL, PADDING
L603	46-102064-3	COIL, TRAP
L651	46-102065-3	COIL, PADDING
L951	46-101899-3	COIL, FILTER
T1	46-101902-3	TRANS, FM IF
T101	46-102066-3	TRANS, AM IF
T201	46-102067-3	TRNAS, FM DISC.
T202	46-102068-3	TRANS, AM IF
T851	46-101412-3	COIL, BALUN
T852	46-101891-3	COIL, BALUN
★T951	46-80937-3	TRANS, HORI-DRIVE.
★T952	46-801009-3	TRANS, FB
MISCELLANEOUS		
PIN1	NSP	PLUG AY
PIN301	NSP	WAFER, 2PIN
PIN302	NSP	WAFER, 6PIN
PIN303	NSP	WAFER, 4PIN
PIN401	NSP	WAFER, 2PIN
PIN501	NSP	WAFER, 2PIN
PIN503	NSP	WAFER, 2PIN
PIN801	NSP	PLUG AY
PIN802	NSP	PLUG AY
PIN803	NSP	WAFER, 3PIN
PIN804	NSP	WAFER, 3PIN
PIN806	NSP	WAFER, 5PIN
CNT1	NSP	CNT AY

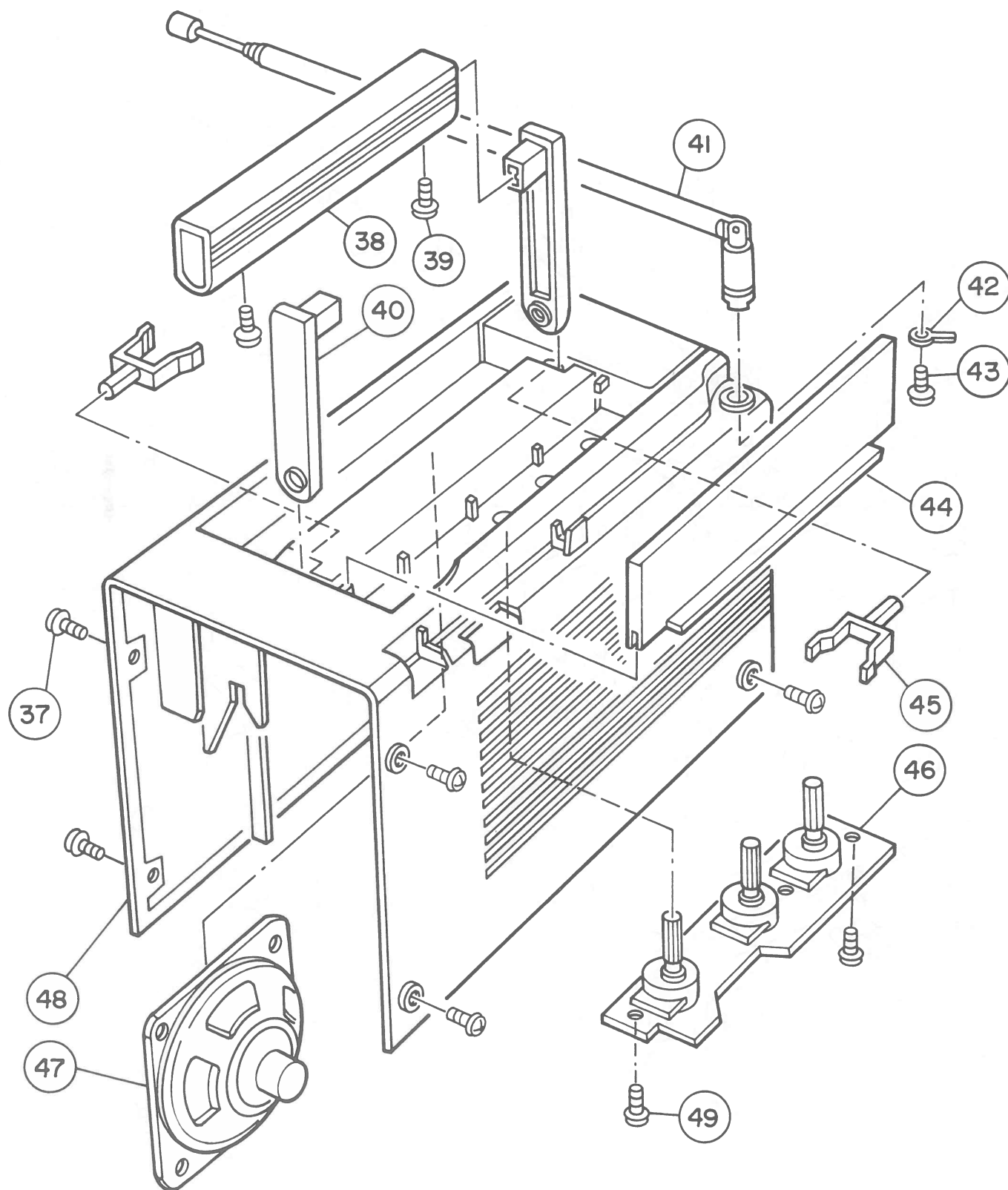
SCHEMATIC LOCATION	PART NO.	DESCRIPTION
CNT301	NSP	CNT AY, 2PIN
CNT302	NSP	CNT AY, 6PIN
CNT303	NSP	CNT AY, 4PIN
CNT401	NSP	CNT AY, 2PIN
CNT501	NSP	CNT AY, 2PIN
CNT503	NSP	CNT AY, 2PIN
CNT801	NSP	CNT AY, 2PIN
CNT802	NSP	CNT AY, 2PIN
CNT803	NSP	CNT AY, 3PIN
CNT804	NSP	CNT AY, 3PIN
CNT806	NSP	CNT AY, 5PIN
CF101	46-13560-3	FILTER, CERAMIC
CF201	46-13717-3	FILTER, CERAMIC
CF202	46-13717-3	FILTER, CERAMIC
CF651	46-13191-3	FILTER, CERAMIC
CF652	46-13556-3	FILTER, CERAMIC
CF801	46-13636-3	FILTER, TPS 4.5MA
SF601	46-131198-3	FILTER, SAF 45MJ
SK801	46-45434-3	SOCKET, CRT
★ SG801	46-13843-3	SPARK GAP,

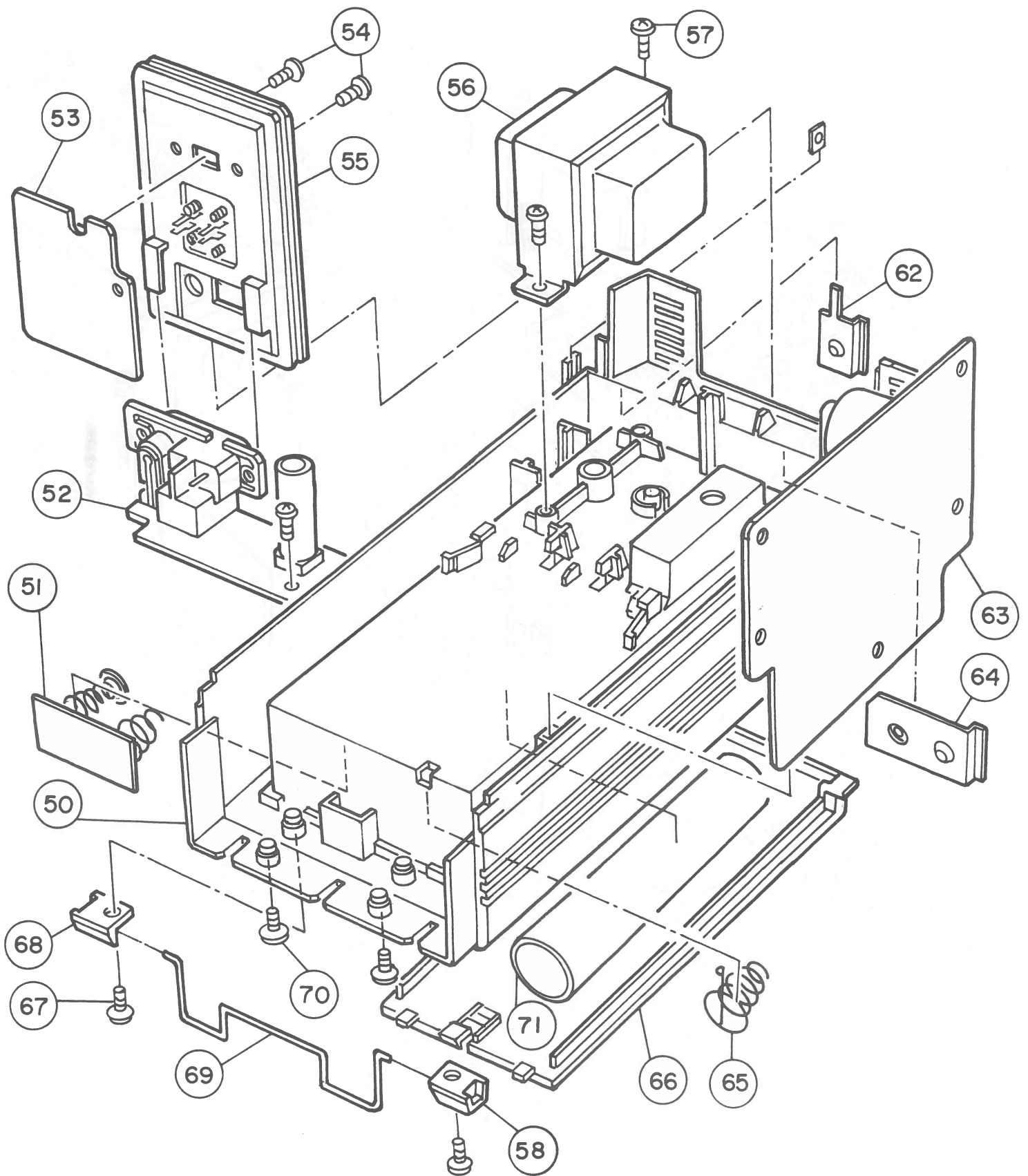
SCHEMATIC LOCATION	PART NO.	DESCRIPTION
KB801	46-2349	CABLE SET AY
TUN801	46-95255-3	TUNER, UHF
TUN802	46-95256-3	TUNER, VHF
VC1-4	46-1997-3	VARICON, POLY
/TC1-4		
BPF	46-102069-3	FILTER, BAND PASS
LPF301	46-102061-3	FILTER, LOW PASS
LPF302	46-102061-3	FILTER, LOW PASS
J401	46-45876-3	JACK, PHONE
J501	46-45793-3	SOCKET, AC-IN
/S502		
J801	46-45791-3	JACK, PHONE
S1-5	46-69742-3	SWITCH, SUF52
S501	46-69743-3	SWITCH, SUF12
S851	46-69627-3	SWITCH
FH501	46-45870-3	FUSE HOLDER
FH502	46-45871-3	FUSE HOLDER
FH503	46-45595-3	FUSE HOLDER
★ F902	46-4384-3	FUSE, 125V 2.0A
★ F903	46-43116-3	FUSE, 125V 0.6A
Y851	46-25132-3	SEPARATOR, UHF/VHF

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CABINET EXPLODED VIEW





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MECHANICAL PARTS LIST

KEY NO.	PART NO.	DESCRIPTION
1	46-50182-3	CASE-FRONT
2	46-57422-3	SCREW, MPC + 3 × 6
3	46-111073-3	HOLDER-PWB
4	46-57656-3	SCREW-SPECIAL
5	46-57354-3	SCREW-TRQ2 + 3 × 8A
6	NSP	PWB MAIN
7	46-57613-3	SCREW-TRQ2 + 3 × 10A
8	NSP	MATAL CRT FIXING
★ 9	46-801008-3	COIL D,Y
10	46-45434-3	SOCKET-CRT
★ 11	140ANB4	CRT-140 ANB4
12	NSP	BAND AY CRT
13	NSP	CONNECTOR AY
14	46-57592-3	SCREW, MPC + 2 × 6
15	NSP	PWB-RF
16	NSP	PLATE-HEAT SINK
17	NSP	METAL-CHASSIS
18	46-521378-3	KNOB-TUNING
19	NSP	SHAFT-TUNING
20	46-391218-3	PULLEY
21	46-58551-3	WASHER-A
22	46-221432-3	CHASSIS-TUNING

KEY NO.	PART NO.	DESCRIPTION
23	46-521382-3	POINTER
24	46-221433-3	HOLDER-PUSH, KNOB
25	46-701130-3	SPRING-KNOB
26	46-221434-3	E-RING
27	46-521379-3	KNOB-POWER
28	46-521380-3	KNOB-VOLUME
29	46-67216-3	WINDOW-SCALE
30	46-521381-3	KNOB-PUSH
31	46-57488-3	SCREW-MPC + 2.6 × 4
32	46-701131-3	SPRING-DIAL
33	46-391219-3	PULLEY-DIAL, RADIO
34	46-391220-3	PULLEY-DIAL, TV
35	46-57656-3	SCREW-SPECIAL
36	46-221435-3	BRACKET-MOUNTING
37	46-57354-3	SCREW- TRR + 3 × 8 FNM
38	46-49280-3	HANDLE
39	46-57353-3	SCREW-TRQ + 3 × 6
40	46-221436-3	HOLDER-HANDLE
41	46-8294-3	ANTENNA-ROD
42	46-45536-3	LUG-SINDING
43	46-57422-3	SCREW-MPC + 3 × 6
44	46-211113-3	DOOR-TV, FUNCTION

KEY NO.	PART NO.	DESCRIPTION
45	46-221437-3	STOPPER-HANDLE
46	46-25150-3	PWB-CONTROL
47	46-33392-3	SPEAKER, 085A20-10908F
48	46-211114-3	CASE-TOP
49	46-57656-3	SCREW-SPECIAL
50	46-211115-3	CASE-BOTTOM
51	46-45872-3	TERMINAL-BATTERY
52	46-25154-3	PWB, POWER
53	46-25151-3	PWB ANT
54	46-57515-3	SCREW-MPC + 2.6 × 5
55	46-211116-3	PLATE-TERMINAL, ASSY
★56	46-801010-3	TRANS-POWER
57	46-57656-3	SCREW-SPECIAL
58	46-221439-3	HOLDER-LEG (R)
59	46-57505-3	SCREW- MPC + 3 × 12
60	46-57538-3	SCREW-SPECIAL

KEY NO.	PART NO.	DESCRIPTION
62	46-45873-3	METAL-BATTERY
63	NSP	PWB-SIGNAL
64	46-45874-3	TERMINAL-BATTERY
65	46-45875-3	SPRING-BATTERY
66	46-211117-3	COVER-BATTERY
67	46-57656-3	SCREW-SPECIAL
68	46-221438-3	HOLDER-LEG (L)
69	46-111075-3	LUG
70	46-57656-3	SCREW-SPECIAL
71	46-37207-3	CASE-BATTERY
	L46-38839-3	OWNERS MANUAL
	L38-13012-0	SAFETY TIPS
	46-23357-3	CAR CORD
	46-23358-3	AC POWER CORD
	46-33393-3	HEAD PHONE

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CONTROL VIEWS

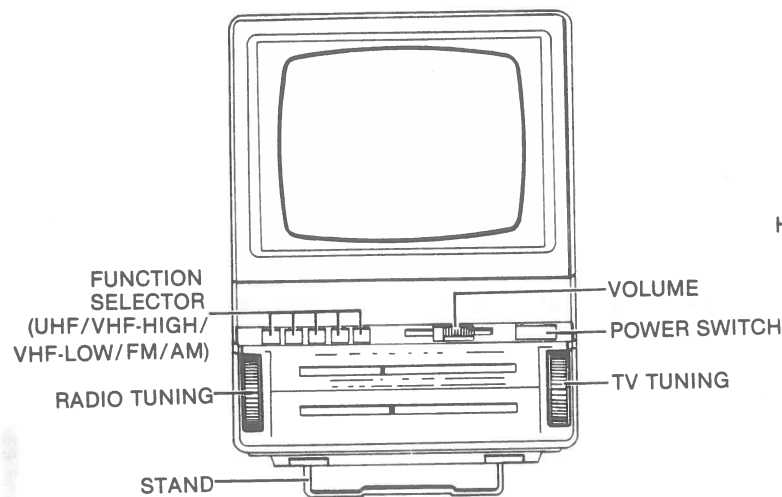


Figure 1. Front controls view

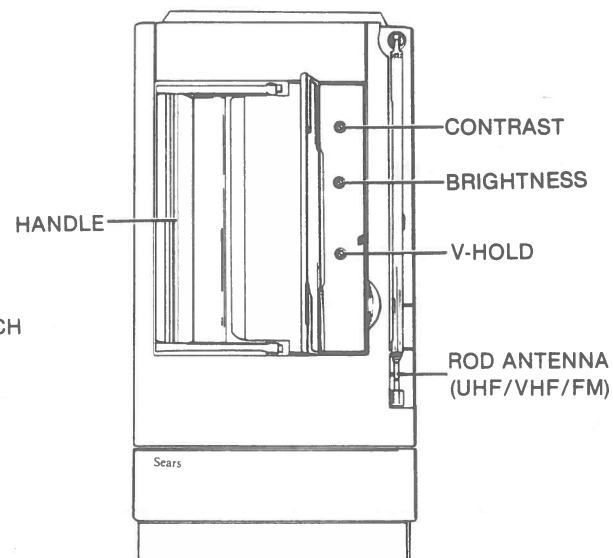


Figure 2. Top controls view

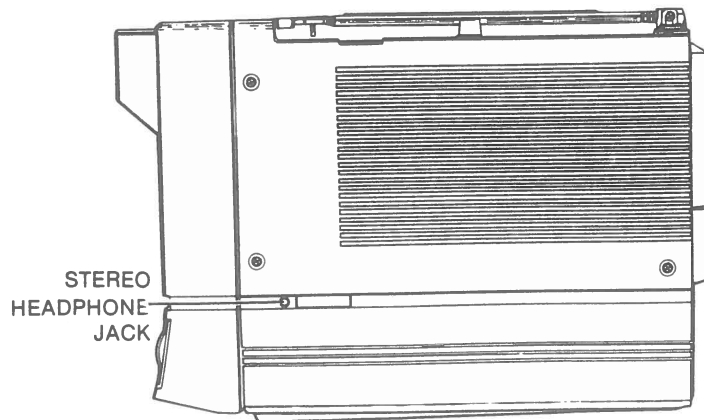


Figure 3. Right side view

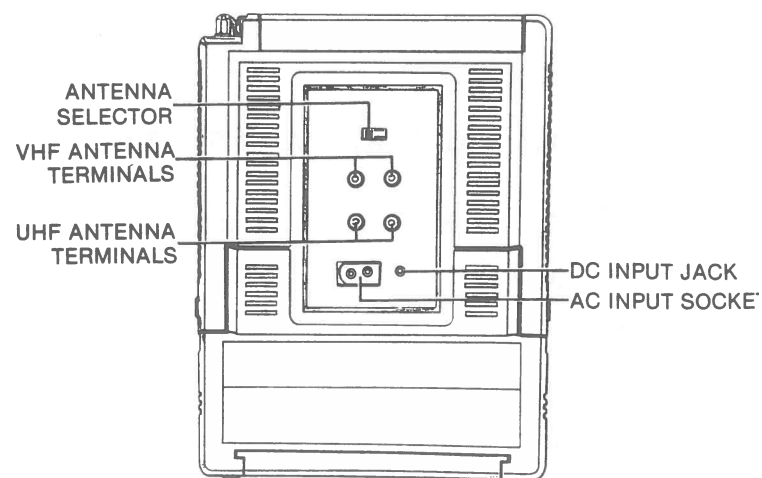


Figure 4. Back controls view

TV SERVICE ADJUSTMENT

AVR (AUTOMATIC VOLTAGE REGULATOR)

Connect a voltmeter across B1 (+B) and B2 (GND). (See figure 5)

Make certain the B+ supply voltage is +11.0V, adjusting the AVR control (R502) shown in figure 7 if necessary.

YOKE POSITION

The yoke is secured to the neck of the picture tube with squeezable clamp.

To adjust the yoke and correct for picture tilt: loosen the clamp, correct tilt, and retighten the clamp.

CENTERING

The picture centering device consists of two rings located at the rear of the yoke assembly. Each ring has a tab for ease of adjustment. The tabs should be rotated and moved towards or away from each other until the picture is properly centered on the picture tube screen.

RF AGC

Observe the input signal, turn the RF AGC control (R608) shown in figure 5 clockwise to the point where the snow noise disappears in the picture.

VERTICAL SIZE AND VERTICAL LINEARITY

Controls R918 and R912 should be adjusted simultaneously to give proper vertical size consistent with good vertical linearity.

Adjustment should be made to extend the picture limits approximately 3/16" (5mm) beyond the top and bottom edges of the mask.

HORIZONTAL HOLD (OSC)

1. By-pass a synchronous signal with connecting an electrolytic condenser at No. 10 of IC 901.
2. Connect a frequency counter across Y1 and Y2.
3. Adjust H-HOLD control (R956) shown in figure 5 so that frequency counter should read 15750Hz.

CHANNEL TUNING

VHF CHANNEL

Connect VHF signal Gen. to the ANT. terminal and adjust R854 so that Gen. signal may received on indicated channel.

UHF CHANNEL

Connect UHF signal Gen. to the ANT. terminal and adjust R853 so that Gen. signal may received on indicated channel.

NOTE: Readjust R854 and R853 so that dial calibration variation on all channels in minimum.

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION" "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGES 2 AND 3 OF THIS MANUAL.

SIGNAL BOARD VIEW

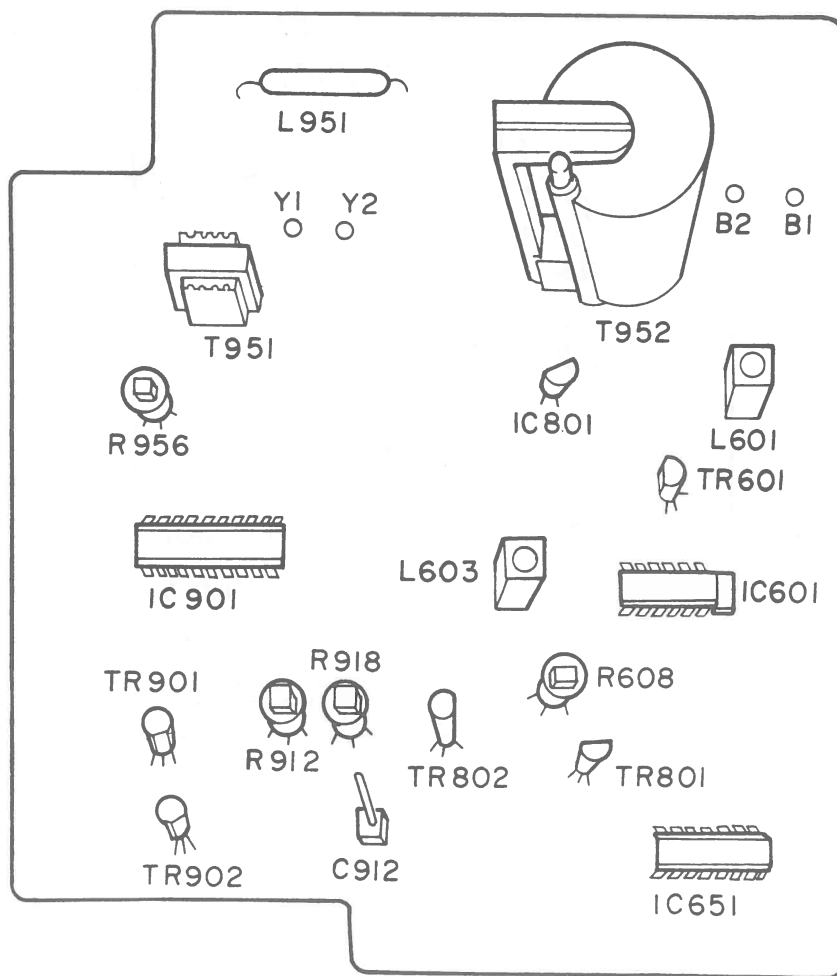


Figure 5

MODEL NO. 580.50290450

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MAIN BOARD VIEW

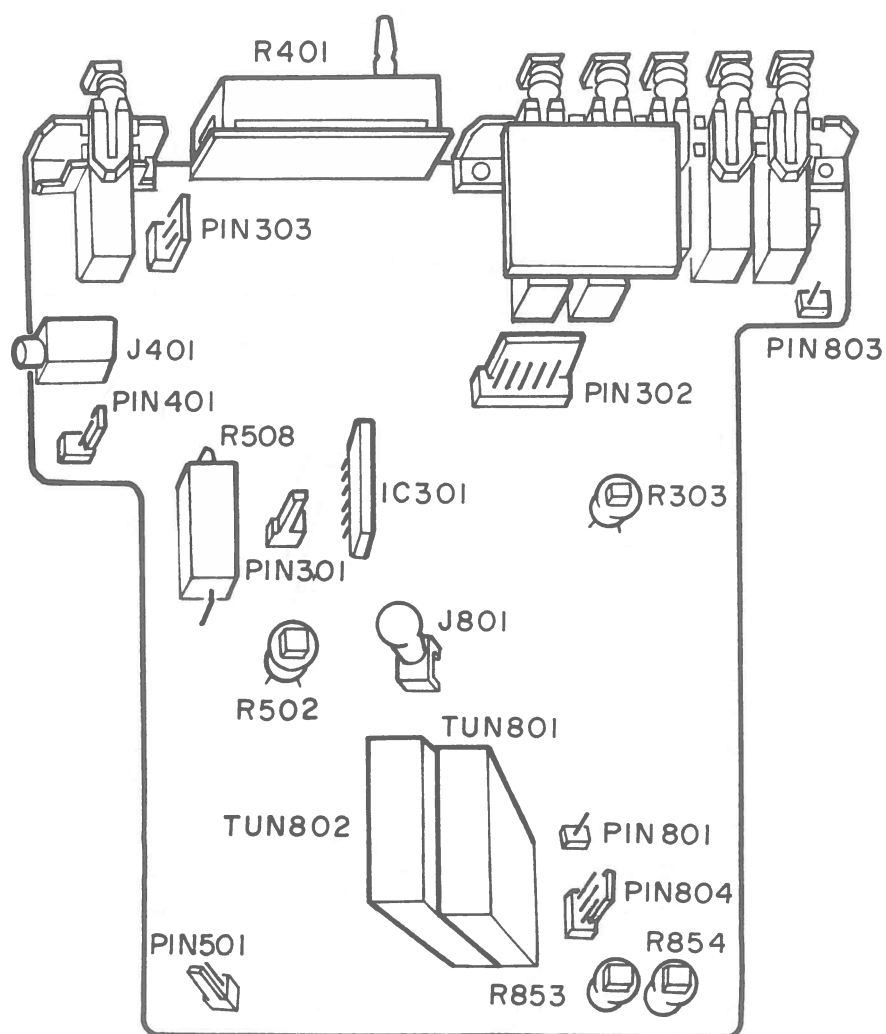


Figure 6

RF BOARD VIEW

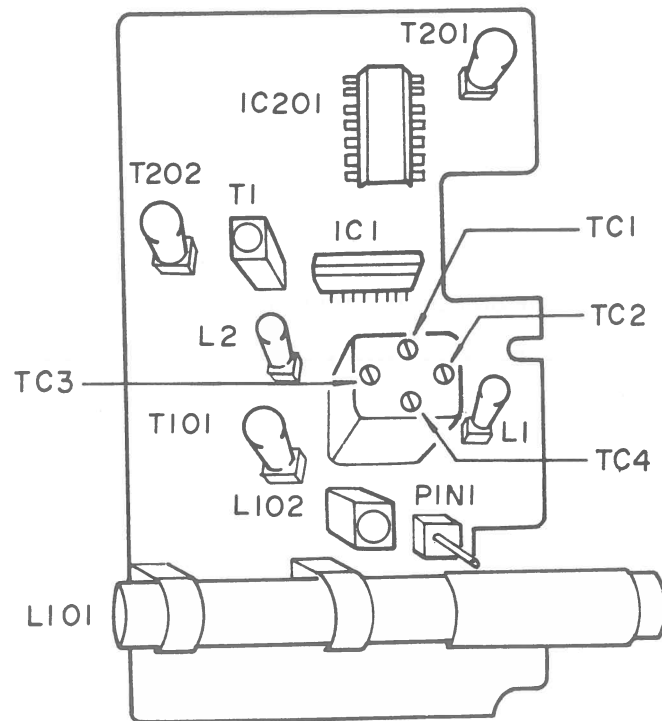


Figure 7

TV AND RADIO ALIGNMENT PROCEDURE

PRELIMINARIES

Alignment is an exacting procedure and should be undertaken only when necessary. The following equipment is required for alignment work.

1. VIF sweep and marker generator
2. Monitor scope
3. Bias supply
4. AM/FM IF Alignment
5. AM/FM signal Generator
6. VTVM

VIDEO IF ALIGNMENT

1. Refer to figures 5 and 8 for alignment points and test equipment connections.
2. Adjust L603 to obtain overall waveform as shown in figure 9.

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION" "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGES 2 AND 3 OF THIS MANUAL.

TV AND RADIO ALIGNMENT PROCEDURE (CONTINUED)

VIDEO IF ALIGNMENT (Cont'd)

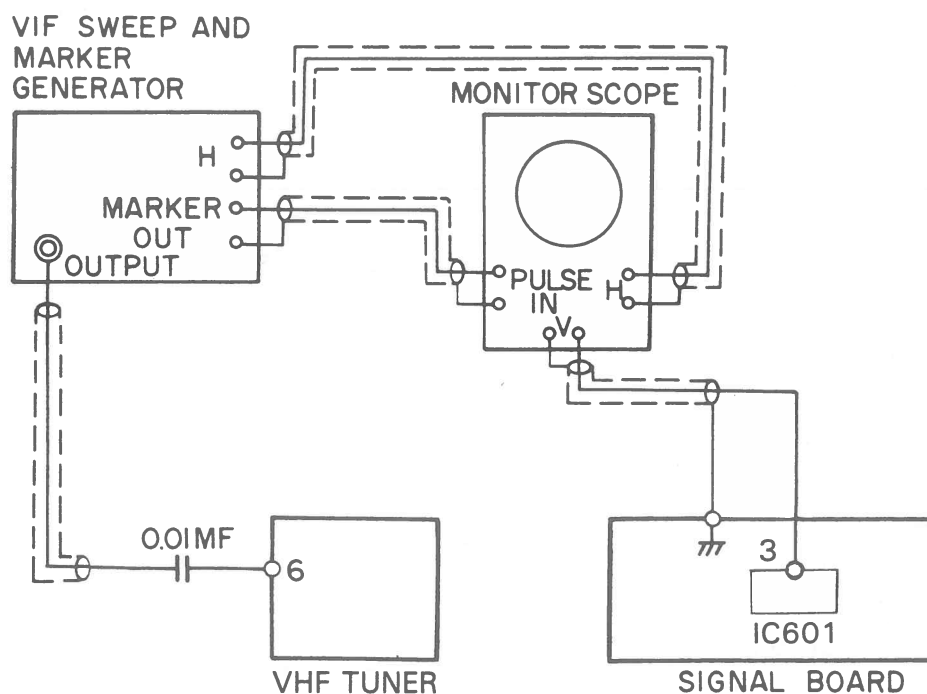


Figure 8 Video IF Alignment connection diagram

TV AND RADIO ALIGNMENT PROCEDURE (CONTINUED)

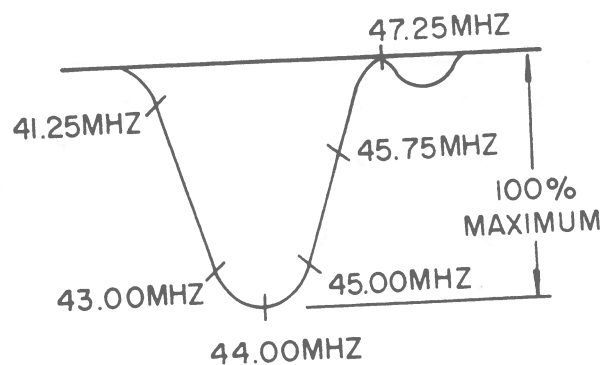


Figure 9

RADIO ALIGNMENT

Supply voltage ... Set the BAND SW to the TV position, adjust R502 so that voltage between the test point B1 (B+) and B2 (GND) is +11.0V.

FM IF ALIGNMENT

IF Generator : Connect the input terminal to IC1.

Oscilloscope : Connect to R204 (See figure 11)

Step	Dial Pointer Setting	Generator. Output	Adjustment for Max. Output
1	High freq. end	10.7 MHz Signal	Adjust T1 (Fig. 10)
2	Repeat Step 1		

TV AND RADIO ALIGNMENT PROCEDURE (CONTINUED)

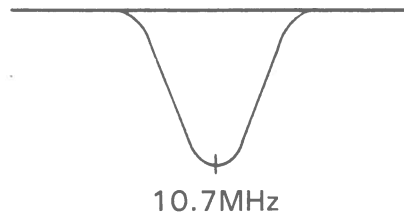


Figure 10

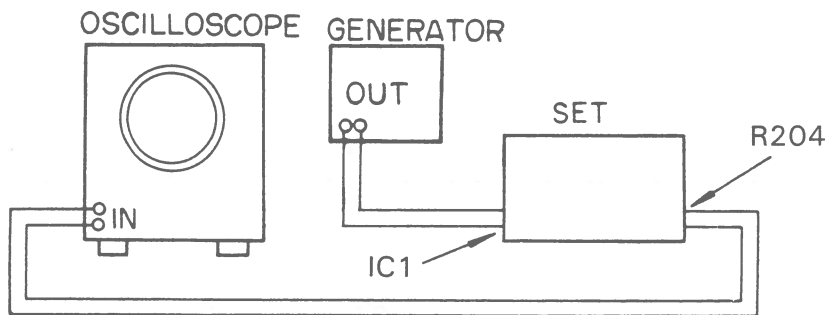


Figure 11 FM IF Alignment connection diagram

FM DISCRIMINATOR ALIGNMENT

Generator and oscilloscope : Connect the same as FM IF Alignment (See Figure 11)

Step	Dial Pointer Setting	Generator output	Adjustment for Max Output
1	High freq. end	10.7 MHz Signal	Adjust T201 so as to obtain "S" curve as shown in Fig. 12
2	Repeat Step 1		

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION" "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGES 2 AND 3 OF THIS MANUAL.

TV AND RADIO ALIGNMENT PROCEDURE (CONTINUED)

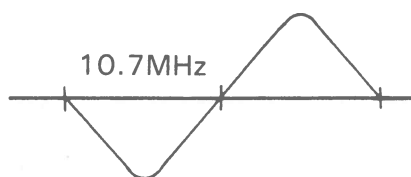


Figure 12

FM RF ALIGNMENT

Signal generator ... Connect the output terminal to the FM antenna thru a dummy antenna. (See figure 13)

Step	Dial Pointer Setting	Signal Gen. Output	Adjustment for Max. Output
1	Low freq. end	87MHz	L2
2	High freq. end	109 MHz	TC1
3	Repeat Steps 1 and 2		
4	Tune to Signal	90 MHz	L1
5	Tune to signal	106 MHz	TC2
6	Repeat Steps 4 and 5		

TV AND RADIO ALIGNMENT PROCEDURE (CONTINUED)

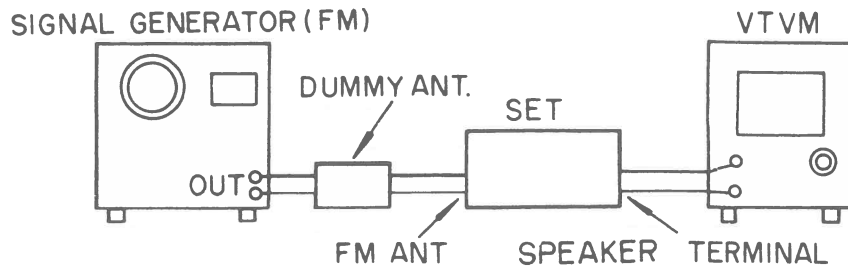


Figure 13 FM RF Alignment connection diagram

MPX ALIGNMENT

Stereo modulator ... Connect the output terminal to the EXT. terminal of the signal generator.

Signal generator ... Connect the output terminal to the FM antenna thru a dummy antenna. (See figure 14)

Step	Dial Pointer Setting	Generator Output	Adjustment for Max. Output
1	98 MHz	98 MHz Signal	Adjust R303 so that frequency counter read 38 kHz.
2	Repeat Step 1		

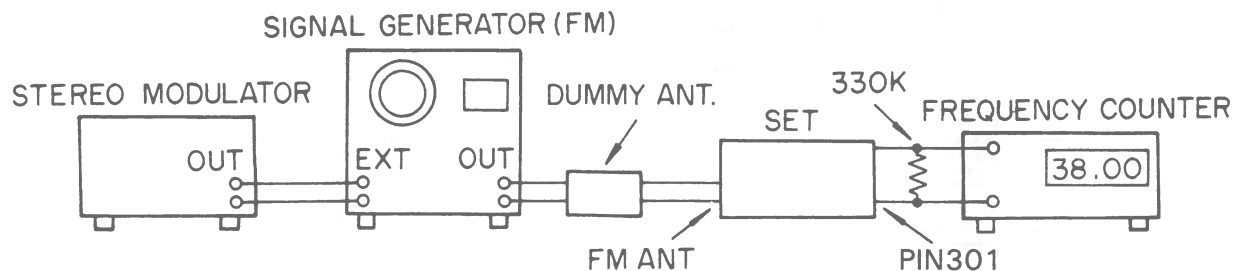


Figure 14 MPX Alignment connection diagram

TV AND RADIO ALIGNMENT PROCEDURE (CONTINUED)

AM IF ALIGNMENT

Oscilloscope : Connect to C209

Generator : Connect the output terminal to L101 (See figure 16).

Step	Dial Pointer Setting	Sweep Gen. Output	Adjustment for Max. Output
1	High Freq. end	455 kHz	T101, T202 (Fig. 15)
2	Repeat Step 1		

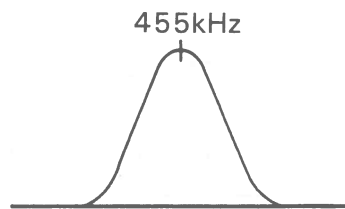


Figure 15

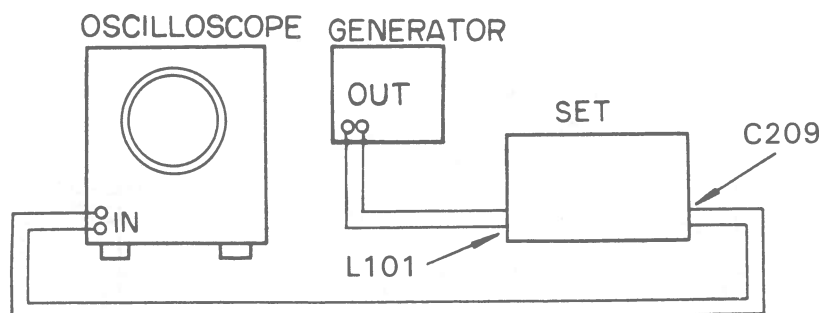


Figure 16 AM IF Alignment connection diagram

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION" "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGES 2 AND 3 OF THIS MANUAL.

TV AND RADIO ALIGNMENT PROCEDURE (CONTINUED)

AM RF ALIGNMENT

Signal generator ... Couple the output terminal to L101 (AM Ant coil) thru a loop antenna (See figure 17)

Step	Dial Pointer Setting	Signal Gen. Output	Adjustment for Max. Output
1	Low freq. end	515 kHz	L102
2	High freq. end	1,650 kHz	TC3
3	Repeat Steps 1 and 2		
4	Tune to Signal	600 kHz	L101
5	Tune to Signal	1,400 kHz	TC4
6	Repeat Steps 4 and 5		

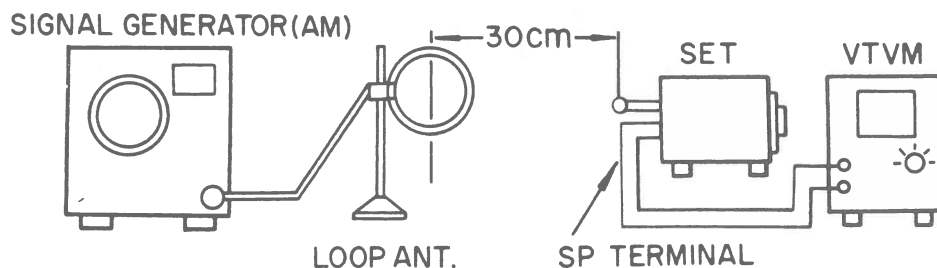


Figure 17 AM RF Alignment connection diagram

DIAL CORD STRINGING

1. Referring to figures 18 and 19, loop the dial cord in the direction of arrows.
2. Dial pointers on scale plate are in low position.

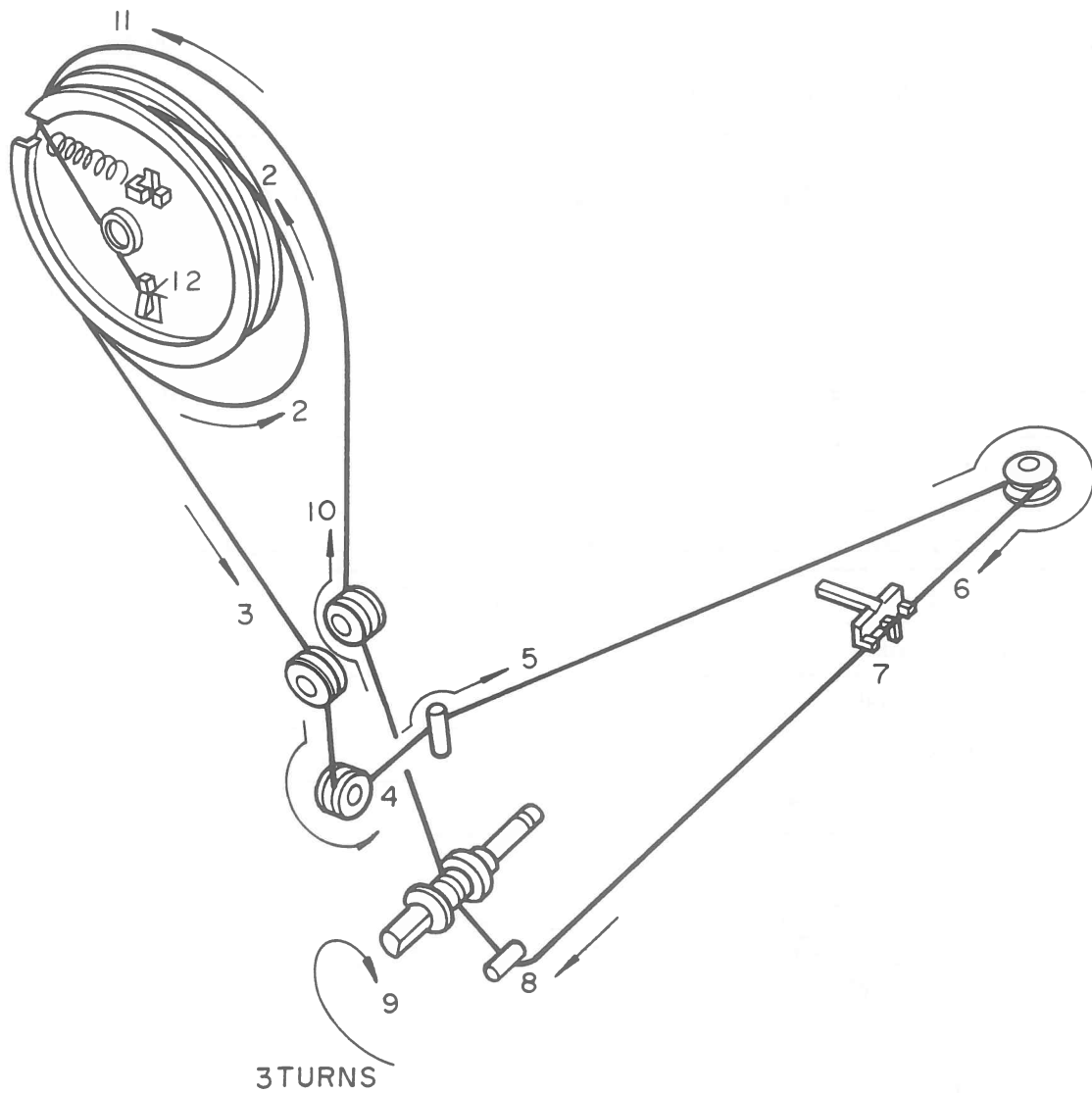


Figure 18 Radio dial cord Stringing

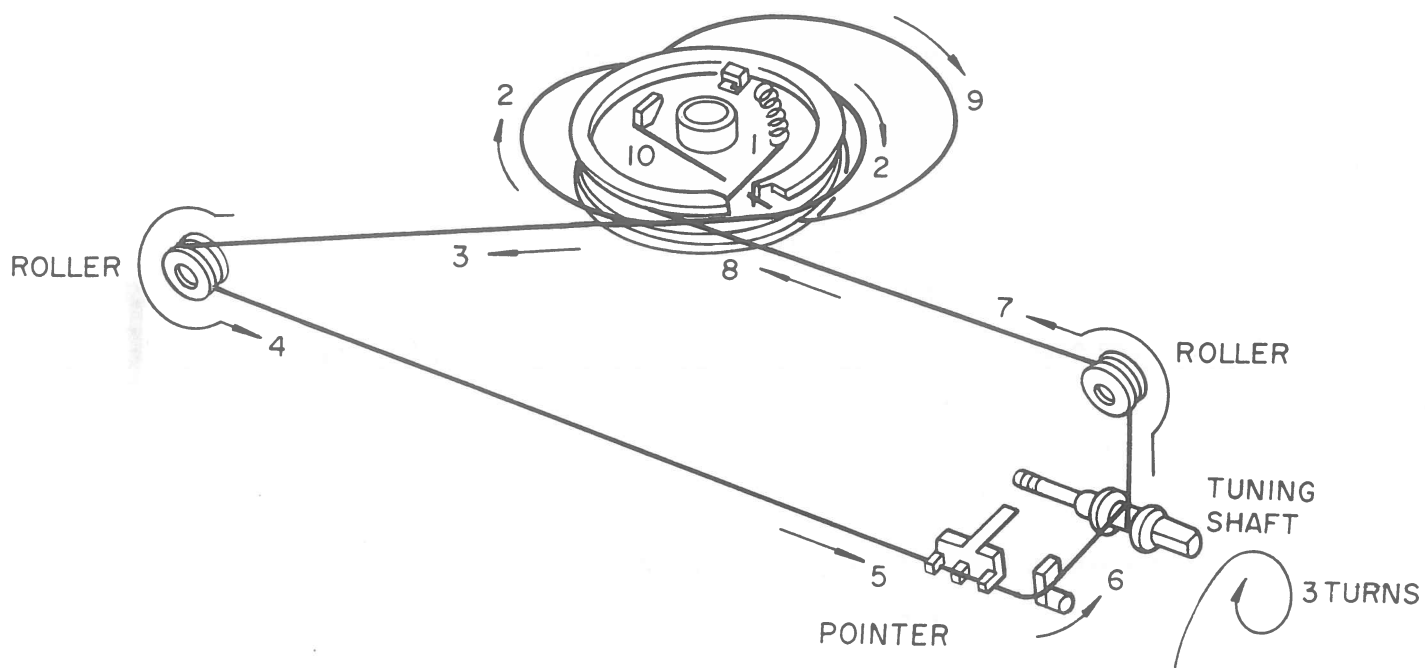


Figure 19 TV dial cord stringing

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION" "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGES 2 AND 3 OF THIS MANUAL.

MECHANICAL DISASSEMBLIES

TOP CASE REMOVAL (See Figure 20)

1. Remove the six screws (Figure 20 Reference 1).
2. Lift the top case up lightly with the handle.
3. To separate the top case easily from the front case, be sure of pulling the front case forward because there are two undercut ribs onto the top case.
4. Remove the connector A, B, and C.

FRONT CASE REMOVAL FROM BOTTOM CASE (See Figure 20)

1. Do not remove any function knobs or power knob.
2. Remove the two screws on the bottom case (Figure 20 Reference 3).
3. Pull it sideward because headphone jack interferes with the bottom case removing.

PICTURE TUBE REMOVAL (See Figure 21)

Remove the four screws (Figure 21 Reference 2).

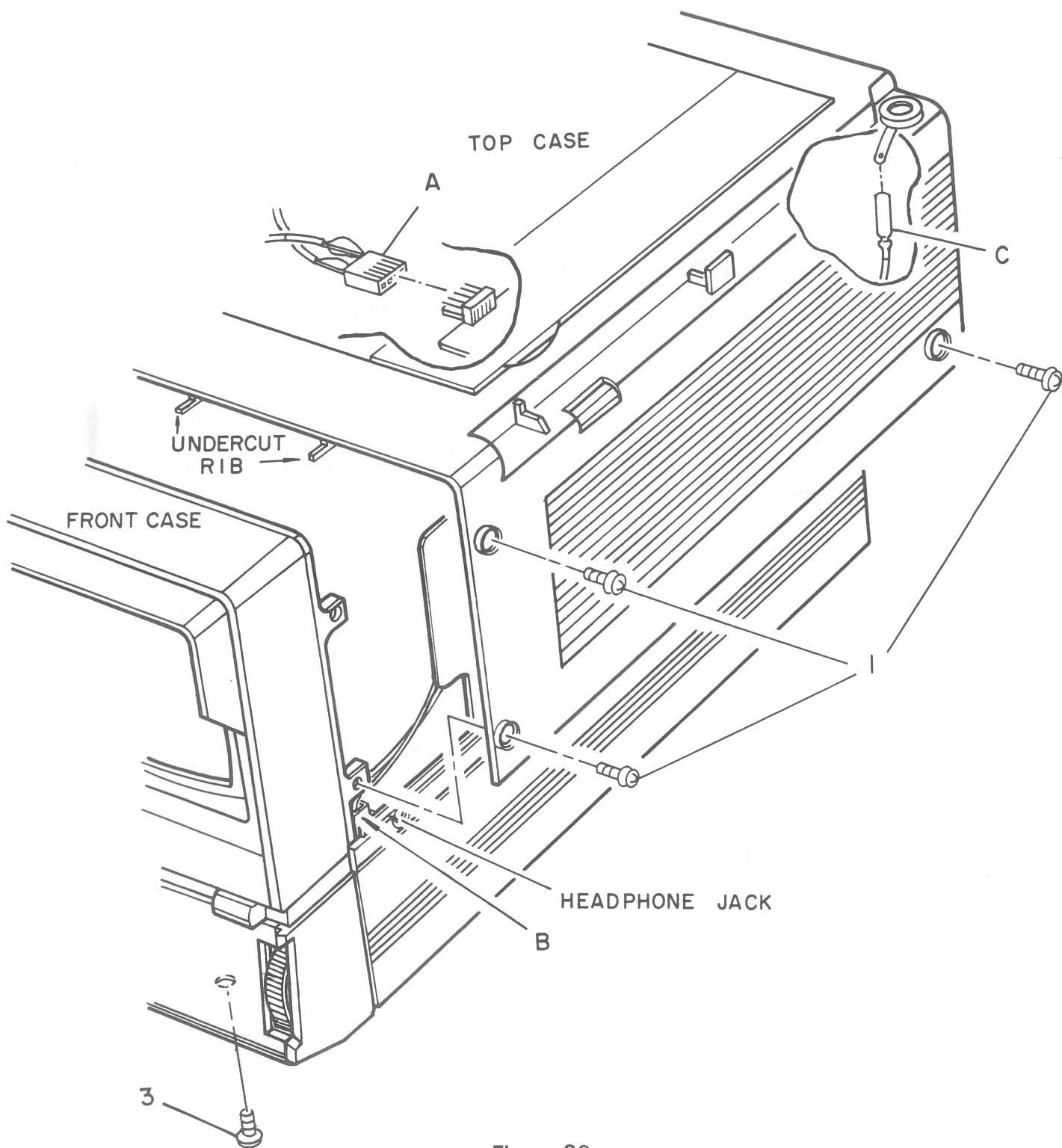


Figure 20

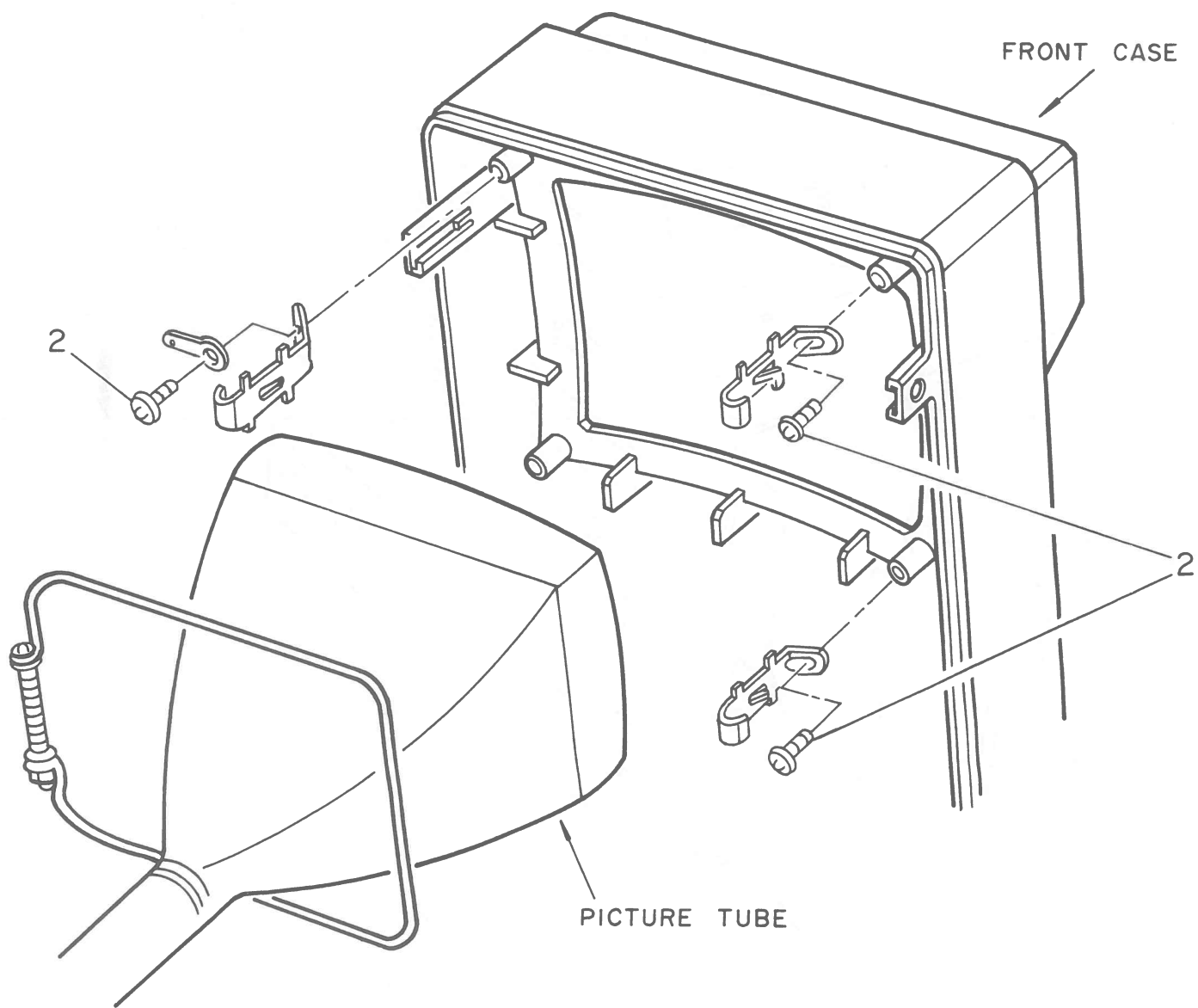


Figure 21

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION".
"SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGES 2 AND 3 OF THIS MANUAL.

MECHANICAL DISASSEMBLIES (CONTINUED)

MAIN AND RF BOARD REMOVAL (See figure 22)

1. To separate the chassis from the front case, remove the two screws (Figure 22 Reference 5).
2. For main board removal, remove two screws (Figure 22 Reference 6).
In this case, the front case is separated from main P.C.B. without removing knobs.
Only VR slide knob will fall apart, others remain on the front case.
3. For RF board removal, remove the one screw for fixing a dial pully and the one screw for a chassis bracket
4. And then pull the RF board out.

SIGNAL BOARD AND TERMINAL ASSY REMOVAL (See Figure 23)

Slide them up from the grooves and the rail ribs in the bottom case.

POWER TRANSFORMER REPLACEMENT (See figure 23)

Remove two screws (Figure 23 Reference 9).

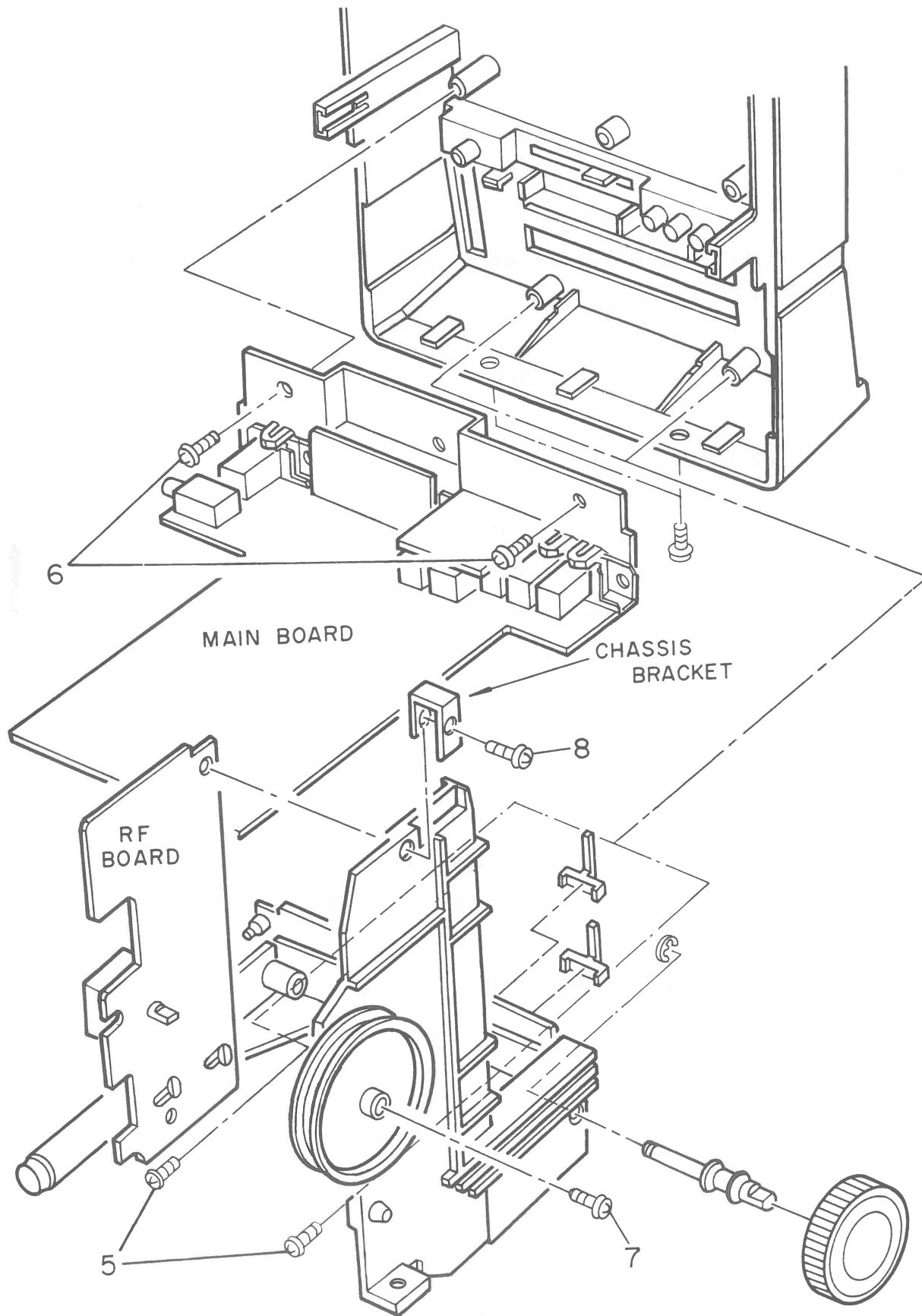


Figure 22
56

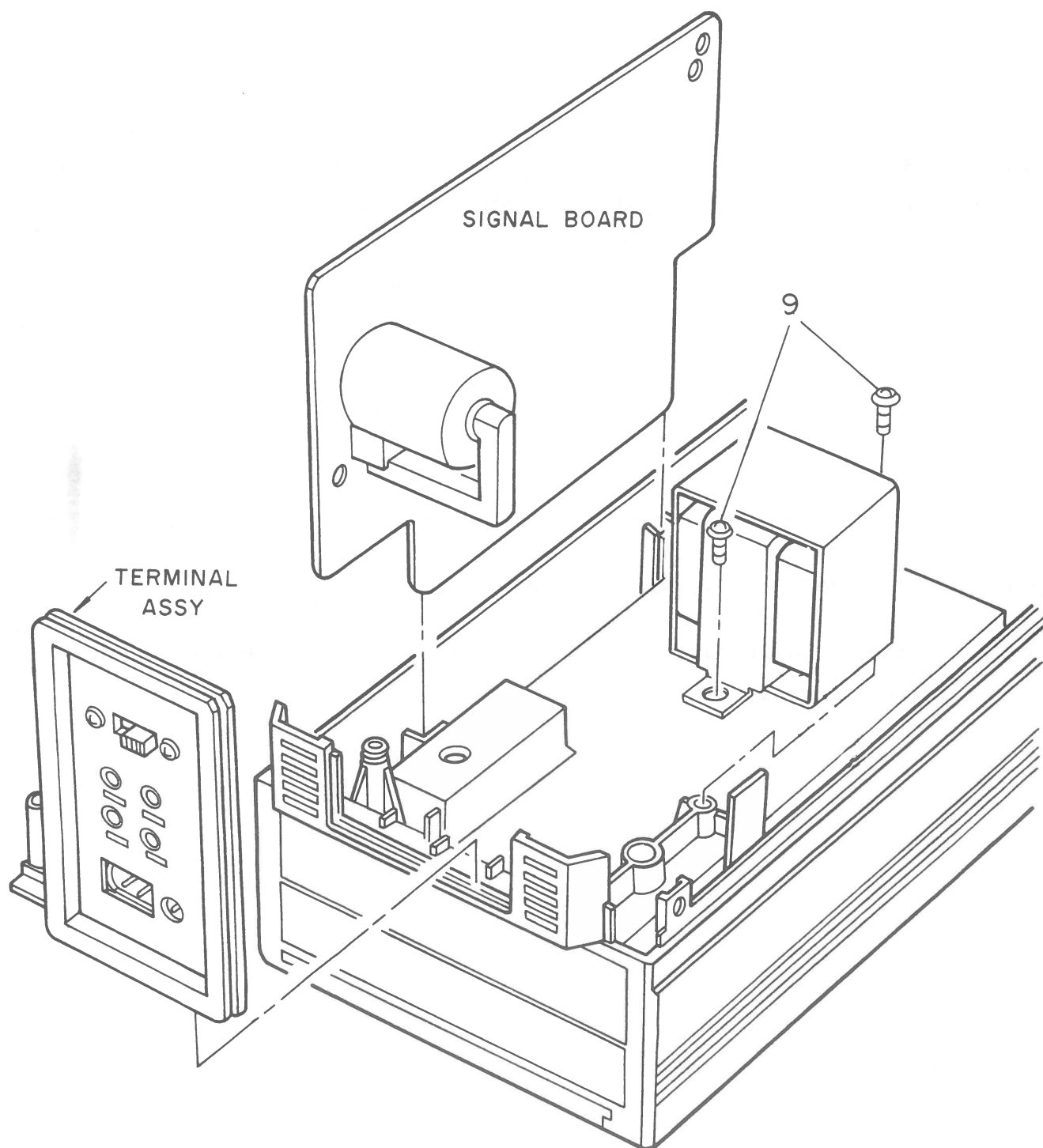


Figure 23

MODEL NO. 580.50290450

Sears
DIVISION 57
TECHNICAL DATA SHEET
TELEVISION/RADIO

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION".
"SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGES 2 AND 3 OF THIS MANUAL.

MECHANICAL DISASSEMBLIES (CONTINUED)

HANDLE DISASSEMBLY FROM TOP CASE (See Figure 24)

1. Draw the handle stoppers out and remove the handle holders from the top case as indicated in figure 24.
2. To replace the handle, remove two screws (Figure 24 Reference 10).

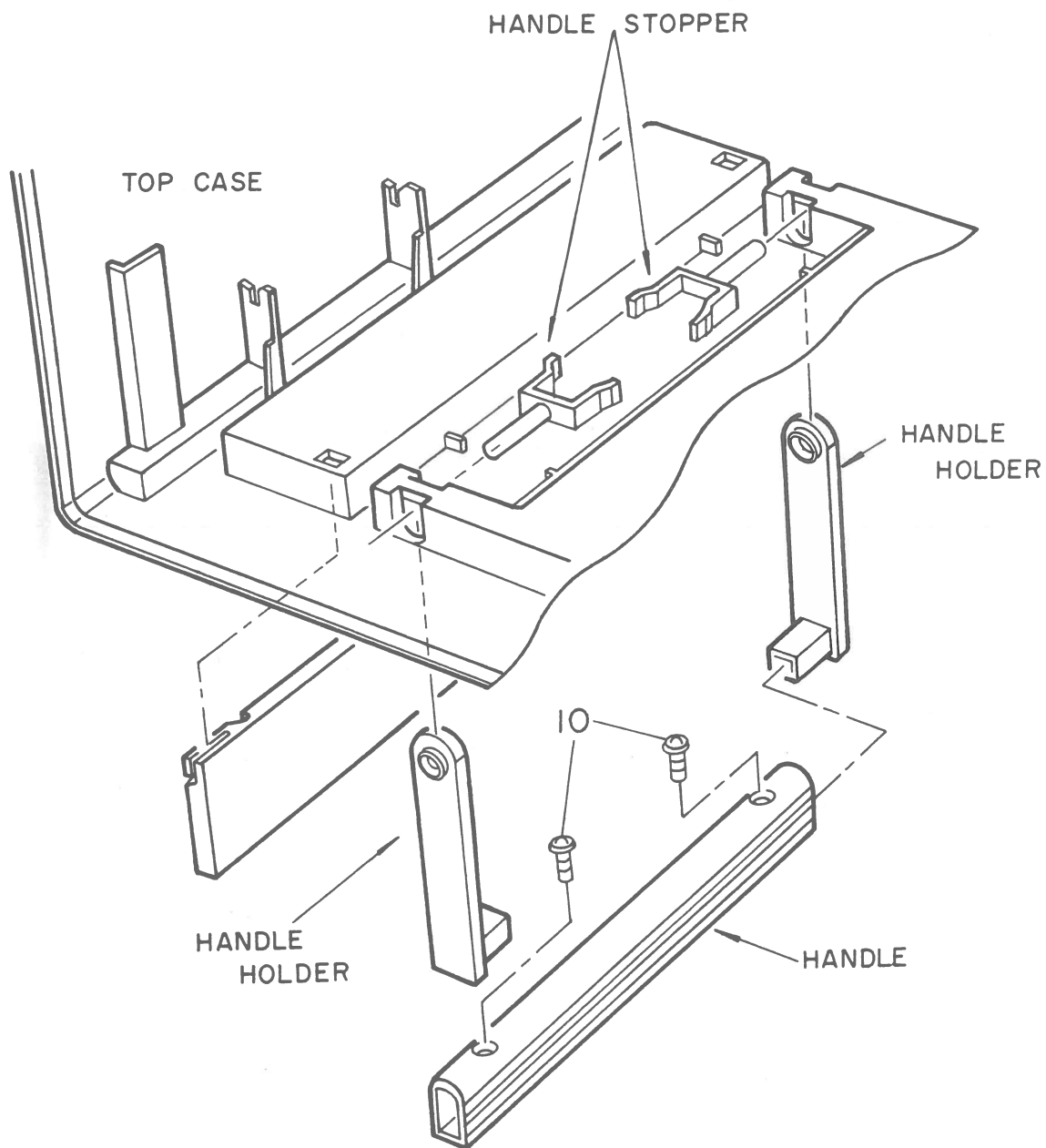


Figure 24

